The Ohio Public Works Commission
65 East State Street, Suite 312, Columbus, Ohio 43215
Phone (614) 466-0880



DISTRICT NUMBER: 2

APPLICATION FOR FINANCIAL ASSISTANCE Revised 7/93

CB801

DATE 10/01/93

IMPORTANT: Applicant should consult the "Instructions for Completion of Project Application" for assistance in the proper completion of this form.

SUBDIVISION: Metropolitan Sewer District of Greater Cincinnati CODE# 061-00061

COUNTY: Hamilton

1.0	PROJECT FINANCIAL INFORMA	TION		
1.1	PROJECT ESTIMATED COSTS: (Round to Nearest Dollar)			Account
a.)	Project Engineering Costs: 1. Preliminary Engineering 2. Final Design 3. Other Engineer Services * Supervision \$ N/A Miscellaneous \$ N/A	\$ N/A .00 \$ N/A .00 \$ N/A .00 .00	\$ 	
b.)	Acquisition Expenses: 1. Land 2. Right-of-Way	\$ <u>N/A</u> .00 \$_N/A .00		
c.)	Construction Costs:	\$3,000.000 .00		·
d.)	Equipment Purchased Directly	1	*************************************	 ,
e.)	Other Direct Expenses:	\$N/A00		
f.)	Contingencies:	\$ <u>300.000</u> .00		
g.)	TOTAL ESTIMATED COSTS:	\$ <u>3,300,000</u> .00	·	
1.2	PROJECT FINANCIAL RESOURC (Round to Nearest Dollar and			
a.) b.) c.) d.)	Local In-Kind Contributions Local Public Revenues Local Private Revenues Other Public Revenues	\$00 \$509.00000 \$N/A00		%
, u.,	1. ODOT PID# 2. EPA/OWDA 3. OTHER	\$ N/A .00 \$ N/A .00 \$ N/A .00		
SUB	TOTAL LOCAL RESOURCES:		\$ <u>509.000</u> .00	15
e.)	OPWC Funds 1. Grant 2. Loan 3. Loan Assistance	\$ 0.00 \$ 2.791.000.00 \$ 0.00		85
SUB	TOTAL OPWC RESOURCES:		\$ <u>2.791.000</u> .00	85
f.) *Othe	TOTAL FINANCIAL RESOURCES er Engineer's Services must be ate.		\$ <u>3.300.000</u> .00 on the required	<u>100%</u> certified engineer'

1.3 AVAILABILITY OF LOCAL FUNDS:

Attach a summary from the <u>Chief Financial Officer</u> listed in section 5.2 listing <u>all local</u> share funds budgeted for the project and the date they are anticipated to be available.

2.0 PROJECT INFORMATION

IMPORTANT: If project is multi-jurisdictional, information must be consolidated in this section.

- 2.1 PROJECT NAME: Trenchless Technology Sewer Rehabilitation
- 2.2 BRIEF PROJECT DESCRIPTION (Sections a through d):
 - a.) SPECIFIC LOCATION: The Metropolitan Sewer District of Greater Cincinnati serves 800,000 residents in a 400 square mile area, and includes 33 municipalities and unincorporated areas within Hamilton County. The District maintains 2,700 miles of sanitary and combined sewers, 6 major wastewater treatment plants, 23 extended aeration treatment plants, 120 package lift stations, and 8 major pumping stations.

PROJECT ZIP CODE: 45238

b.) PROJECT COMPONENTS:

edistant.

Rehabilitation of existing sanitary and combined sewers using trenchless technology.

c) PHYSICAL DIMENSIONS/CHARACTERISTICS:

Diameter of existing sewers: 8", 12", 15", 18", 22", 24", 27" and 36".

d.) DESIGN SERVICE CAPACITY:

IMPORTANT: Detail shall be included regarding current service capacity vs proposed service level.

If road or bridge project, include ADT. If water or wastewater project, include both current residential rates based on monthly usage of 7,756 gallons per household.

Attach current rate ordinance.

Based on 7,756 gallons per month. The current residential monthly rate is \$21.95.

2.3 USEFUL LIFE/COST ESTIMATE: Project Useful Life: 40 Years.

Attach Registered Professional Engineer's statement, with original seal and signature certifying the project's useful life indicated above and estimated cost.

3.0 REPAIR/REPLACEMENT or NEW/EXPANSION:

		RTION OF PROJECT REPAIR Requested for Repair and Repla		\$3,300,000 100 % \$2,791,000 85 %
State	Funds	RTION OF PROJECT NEW/EX Requested for New and Expansion ect Grant Funding for New and Expansion	οn	\$
4.0	PRC	JECT SCHEDULE:*		· ·
			BEGIN DATE	END DATE
	4.1	Engineering/Design:	07 / 01 / 93	09 / 30 / 93
	4.2	Bid Advertisement:	04 / 01 / 94	04 / 30 / 94
	4_3	Construction:	07 / 01 / 94	12 / 31 / 94

^{*} Failure to meet project schedule may result in termination of agreement for approved projects. Modification of dates must be approved in writing by the Commission once the Project Agreement has been executed. Dates should assume project agreement approval/release on July 1st. of the Program Year applied for.

5.0 APPLICANT INFORMATION:

5.1	OFFICER	TTAE	Mr. David J. Krings
	TITLE		Hamilton County Administrator
	STREET	٠,	County Administration Building, Room 603
	011001		Cincinnati, Ohio 45202
	בודיע/יידוים		

PHONE (513) 632 8225 FAX (513) 632 5797

5.2 CHIEF FINANCIAL

OFFICER	• •	Mr. Raymond J. Fern	
TITLE		Director of Budget and Research	
STREET		County Administration Building, Room 607	
		Cincinnati, Ohio 45202	
CITY/ZIP			
PHONE	•	(513) 632 - 8888	•
FAY		(513) 632 - 5797	

5.3 PROJECT MANAGER

TITLE	Mr. Thomas J. Quinn	
STREET	Director, MSDGC	
	1600 Gest Street	
CITY/ZIP	Cincinnati, Ohio 45204	
PHONE	(513) 244 - 5121	
FAX	(513) 244 _ 1399	

6.0 ATTACHMENTS/COMPLETENESS REVIEW:

Check each section below, confirming that all required information is included in this application.

- X A certified copy of the legislation by the governing body of the applicant authorizing a designated official to submit this application and execute contracts. (Attach)
- X A summary from the applicant's Chief Financial Officer listing all local share funds budgeted for the project and the date they are anticipated to be available. (Attach)
- A registered professional engineer's estimate of projects useful life and cost estimate, as required in 164-1-14 and 164-1-16 of the Ohio Administrative Code. Estimates shall contain engineer's original seal and signature, (Attach)
- NA A copy of the cooperation agreement(s) if this project involves more than one subdivision or district.(Attach)
- _____ Capital Improvements Report: (Required by 164 O.R.C. on standard form) _____ A: Attached.
 - X B: Report/Update Filed with the Commission within the last twelve months.
- NA Floodplain Management Permit: Required if project is in 100 year floodplain. See Instructions.
- X Supporting Documentation: Materials such as additional project description, photographs, economic impact (temporary and/or full time jobs likely to be created as a result of the project), and other information to assist your district committee in ranking your project.

7.0 APPLICANT CERTIFICATION:

The undersigned certifies that (1) he/she is legally authorized to request and accept financial assistance from the Ohio Public Works Commission; (2) that to the best of his/her knowledge and belief, all representations that are part of this application are true and correct; (3) that all official documents and commitments of the applicant that are part of this application have been dulyauthorized by the governing body of the applicant; and, (4) should the requested financial assistance be provided, that in the execution of this project, the applicant will comply with all assurances required by Ohio Law, including those involving minority business utilization, Buy Ohio, and prevailing wages.

IMPORTANT: Applicant certifies that physical construction on the project as defined in the application has NOT begun, and will not begin until a Project Agreement and a Notice To Proceed for this project has been executed with the Ohio Public Works Commission. Action to the contrary will result in termination of the agreement and withdrawal of Ohio Public Works Commission funding of the project.

Mr. David J. Krings, Hamilton County Administrator Certifying Representative (Type or Print Name and Title)

September 30, 1993
Signature Date Signed Plb

LOAN SUPPLEMENT

This supplement is required for all loan applicants.

ach the following to the "Ohio Public Works Commission Application for Assistance"

		current rates.

A statement from applicant's Chief Fiscal Officer certifying method of repayment.

A copy of previous year Financial Statement.

Complete the following:

NUMBER OF CUSTOMERS	Water	Sewer
Residential	•	198,000
Commerical		21,000
Industrial		990
Other		

				
SYSTEM EXPENDITURES	Water	1993 Budget Sewer See Attached		
Operation Expenses		\$64,284,000		
Debt Service Payments		22,578,000		
egurplus				
General Fund Transfer				
Other - Equipment		1,910,000		

RATES	Water	Sewer
Current		See Attached Resolution
Last Increase (year and amount)		1993 – 20%
Planned Increase		1995 - 15%

RATINGS

Moody's	S&P	General Obligation	Revenues 1992
A1	AA-	N/A	\$80,000,000

DEBT OUTSTANDING (do not include new OPWC loan)	Total Debt	Annual Payment	Last Payment Date
Other OPWC loans			
^D evenue Bonds	\$238,700,000	\$18,453,000	Various
GO Bonds			
Other	11,052,000	1,973,000	Various

See audited 1992 financial statements pages 11 and 13, official statement for 1993 bond issue page 11, and 1994 budget projection.

City of Cincinnati



Interdepartment Correspondence Sheet

	9/30/93
Date	

То	Joseph P. Niehaus, P.E., Superintendent, Planning and Program
From	G. Stephen Minges, P.E., Superintendent, Wastewater Collection
Copies to	Dir. File, Div. Files, Reading File, CIP File #91-16
Subject	CIP 91-16 SANITARY SEWER NO. 3359 TRENCHLESS TECHNOLOGY

The attached Table shows 152 locations identified by the Wastewater Collection Division for internal sewer pipe rehabilitation. This project is scheduled to be funded under Capital Improvement Project No. 91-16, Sanitary Sewer No. 3359 Trenchless Technology. The engineers estimated construction cost for this project is \$3,000,000.00, it is also estimated that this technology will extend the useful life of the sewer by forty years.

G. Stephen Minges, P.E. #E-43087

Stephen Minge

GSM: bkw

attachment



1993-B CIP LINING CONTRACT

NUMBER NAME	JOB	STREET			*NOMINAL	
1 ALLAIRE AVE. COLERAIN TWP. 229 8 2 2 ANDOVER RD. GREEN HILLS 109 8 3 3 ASHBY ST GREEN HILLS 303 8 5 4 ASHBY ST. GREEN HILLS 302 8 4 5 BACHMAN ST. GREEN HILLS 170 8 1 6 BACHMAN ST. GREENHILLS 170 8 1 6 BACHMAN ST. GREENHILLS 170 8 1 8 BEILKAMP PL. GREENHILLS 170 8 14 8 BERKLEY CR.N. SILVERTON 373 8 10 9 BROMPTON ST. GREEN HILLS 140 8 6 10 BROMPTON ST. GREEN HILLS 300 8 10 11 BROMPTON ST. GREEN HILLS 300 8 10 12 BURLEY CIR. GREEN HILLS 303 8 4 13 BURLEY CIR. GREEN HILLS 303 8 4 14 BURWOOD AVE. NORWOOD 276 8 18 15 CATALPA AVE. N. COLLEGE HILL 389 8 18 16 CEDAR ALLEY CARTHAGE 392 8 13 17 COURTLAND AVE. NORWOOD 261 8 6 18 COURTLAND AVE. NORWOOD 122 8 7 19 CRESTVIEW AVE. NORWOOD 122 8 7 19 CRESTVIEW AVE. PLEASANT RDG. 348 8 14 20 DAMMON RD. GREENHILLS 175 8 6 18 COURTLAND AVE. NORWOOD 261 8 6 19 CRESTVIEW AVE. PLEASANT RDG. 348 8 14 20 DAMMON RD. GREENHILLS 175 8 6 21 DAYSPRING TER. GREENHILLS 106 8 1 22 DEBBIE LN. BOND HILL 236 8 4 23 DELWARE DEER PARK 250 8 10 24 DEWITT ST. GREEN HILLS 106 8 1 25 DEWITT ST. GREEN HILLS 106 8 1 26 DEWITT ST. GREEN HILLS 106 8 1 27 DEWITT ST. GREEN HILLS 106 8 1 28 EDWOOD DR. COLLEGE HILL 391 8 15 29 EMERSON AVE. N COLLEGE HILL 391 8 15 29 EMERSON AVE. N COLLEGE HILL 391 8 15 29 EMERSON AVE. N COLLEGE HILL 391 8 15 29 EMERSON AVE. N COLLEGE HILL 391 8 15 29 EMERSON AVE. N COLLEGE HILL 391 8 15 29 EMERSON AVE. N COLLEGE HILL 391 8 15 29 EMERSON AVE. N COLLEGE HILL 391 8 15 29 EMERSON AVE. N COLLEGE HILL 391 8 15 29 EMERSON AVE. N COLLEGE HILL 391 8 15 29 EMERSON AVE. N COLLEGE HILL 310 8 14 30 FARRAGUT RD. GREENHILLS 160 8 14 31 FELDMAN NORWOOD 283 8 25 32 GAMBIER AVE. GREENHILLS 153 8 9 33 GERMANIA AVE. FAIRFAX 413 8 22 35 GLENWAY WESTERN HILLS 377 8 11 36 GLOBE AVE	NUMBER	R NAME	AREA		DIAMETER	TAPS
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18 COURTLAND AVE. NORWOOD 132 8 7 19 CRESTVIEW AVE. PLEASANT RDG. 348 8 14 20 DAMMON RD. GREENHILLS 175 8 6 21 DAYSPRING TER. GREENHILLS 215 8 5 22 DEBBIE LN. BOND HILL 236 8 4 23 DELWARE DEER PARK 250 8 10 24 DEWITT ST GREEN HILLS 106 8 1 25 DEWITT ST. GREEN HILLS 90 8 4 26 DEWITT ST. GREEN HILLS 126 8 3 27 DEWITT ST. GREEN HILLS 198 8 4 28 EDWOOD DR. COLLEGE HILL 391 8 15 29 EMERSON AVE. N COLLEGE HILL 310 8 14 30 FARRAGUT RD. GREENHILLS 160 8 14 <	17	COURTLAND AVE.	NORWOOD			
19 CRESTVIEW AVE. PLEASANT RDG. 348 8 14 20 DAMMON RD. GREENHILLS 175 8 6 21 DAYSPRING TER. GREENHILLS 215 8 5 22 DEBBIE LN. BOND HILL 236 8 4 23 DELWARE DEER PARK 250 8 10 24 DEWITT ST GREEN HILLS 106 8 1 25 DEWITT ST. GREEN HILLS 90 8 4 26 DEWITT ST. GREEN HILLS 126 8 3 27 DEWITT ST. GREEN HILLS 198 8 4 28 EDWOOD DR. COLLEGE HILL 391 8 15 29 EMERSON AVE. N COLLEGE HILL 310 8 14 30 FARRAGUT RD. GREENHILLS 160 8 14 31 FELDMAN NORWOOD 283 8 25 32 GAMBIER AVE. GREENHILLS 153 8 9 33	18	COURTLAND AVE.	NORWOOD			
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21 DAYSPRING TER. GREENHILLS 215 8 5 22 DEBBIE LN. BOND HILL 236 8 4 23 DELWARE DEER PARK 250 8 10 24 DEWITT ST GREEN HILLS 106 8 1 25 DEWITT ST. GREEN HILLS 90 8 4 26 DEWITT ST. GREEN HILLS 126 8 3 27 DEWITT ST. GREEN HILLS 98 8 4 28 EDWOOD DR. COLLEGE HILL 391 8 15 29 EMERSON AVE. N COLLEGE HILL 310 8 14 30 FARRAGUT RD. GREENHILLS 160 8 14 31 FELDMAN NORWOOD 283 8 25 32 GAMBIER AVE. GREENHILLS 153 8 9 33 GERMANIA AVE. FAIRFAX 256 8 4 34 GERMANIA AVE. FAIRFAX 413 8 22 35 <	20	DAMMON RD.				
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23 DELWARE DEER PARK 250 8 10 24 DEWITT ST GREEN HILLS 106 8 1 25 DEWITT ST. GREEN HILLS 90 8 4 26 DEWITT ST. GREEN HILLS 126 8 3 27 DEWITT ST. GREEN HILLS 98 8 4 28 EDWOOD DR. COLLEGE HILL 391 8 15 29 EMERSON AVE. N COLLEGE HILL 310 8 14 30 FARRAGUT RD. GREENHILLS 160 8 14 31 FELDMAN NORWOOD 283 8 25 32 GAMBIER AVE. GREENHILLS 153 8 9 33 GERMANIA AVE. FAIRFAX 256 8 4 34 GERMANIA AVE. FAIRFAX 413 8 22 35 GLENWAY WESTERN HILLS 377 8 11 36 GLOBE AVE NORWOOD 238 8 21	22	DEBBIE LN.	BOND HILL			
24 DEWITT ST GREEN HILLS 106 8 1 25 DEWITT ST. GREEN HILLS 90 8 4 26 DEWITT ST. GREEN HILLS 126 8 3 27 DEWITT ST. GREEN HILLS 98 8 4 28 EDWOOD DR. COLLEGE HILL 391 8 15 29 EMERSON AVE. N COLLEGE HILL 310 8 14 30 FARRAGUT RD. GREENHILLS 160 8 14 31 FELDMAN NORWOOD 283 8 25 32 GAMBIER AVE. GREENHILLS 153 8 9 33 GERMANIA AVE. FAIRFAX 256 8 4 34 GERMANIA AVE. FAIRFAX 413 8 22 35 GLENWAY WESTERN HILLS 377 8 11 36 GLOBE AVE NORWOOD 238 8 21	23	DELWARE	DEER PARK			
25 DEWITT ST. GREEN HILLS 90 8 4 26 DEWITT ST. GREEN HILLS 126 8 3 27 DEWITT ST. GREEN HILLS 98 8 4 28 EDWOOD DR. COLLEGE HILL 391 8 15 29 EMERSON AVE. N COLLEGE HILL 310 8 14 30 FARRAGUT RD. GREENHILLS 160 8 14 31 FELDMAN NORWOOD 283 8 25 32 GAMBIER AVE. GREENHILLS 153 8 9 33 GERMANIA AVE. FAIRFAX 256 8 4 34 GERMANIA AVE. FAIRFAX 413 8 22 35 GLENWAY WESTERN HILLS 377 8 11 36 GLOBE AVE NORWOOD 238 8 21	24	DEWITT ST	GREEN HILLS			
26 DEWITT ST. GREEN HILLS 126 8 3 27 DEWITT ST. GREEN HILLS 98 8 4 28 EDWOOD DR. COLLEGE HILL 391 8 15 29 EMERSON AVE. N COLLEGE HILL 310 8 14 30 FARRAGUT RD. GREENHILLS 160 8 14 31 FELDMAN NORWOOD 283 8 25 32 GAMBIER AVE. GREENHILLS 153 8 9 33 GERMANIA AVE. FAIRFAX 256 8 4 34 GERMANIA AVE. FAIRFAX 413 8 22 35 GLENWAY WESTERN HILLS 377 8 11 36 GLOBE AVE NORWOOD 238 8 21	25	DEWITT ST.	GREEN HILLS			
27 DEWITT ST. GREEN HILLS 98 8 4 28 EDWOOD DR. COLLEGE HILL 391 8 15 29 EMERSON AVE. N COLLEGE HILL 310 8 14 30 FARRAGUT RD. GREENHILLS 160 8 14 31 FELDMAN NORWOOD 283 8 25 32 GAMBIER AVE. GREENHILLS 153 8 9 33 GERMANIA AVE. FAIRFAX 256 8 4 34 GERMANIA AVE. FAIRFAX 413 8 22 35 GLENWAY WESTERN HILLS 377 8 11 36 GLOBE AVE NORWOOD 238 8 21	26	DEWITT ST.	GREEN HILLS	126		
28 EDWOOD DR. COLLEGE HILL 391 8 15 29 EMERSON AVE. N COLLEGE HILL 310 8 14 30 FARRAGUT RD. GREENHILLS 160 8 14 31 FELDMAN NORWOOD 283 8 25 32 GAMBIER AVE. GREENHILLS 153 8 9 33 GERMANIA AVE. FAIRFAX 256 8 4 34 GERMANIA AVE. FAIRFAX 413 8 22 35 GLENWAY WESTERN HILLS 377 8 11 36 GLOBE AVE NORWOOD 238 8 21	27	DEWITT ST.	GREEN HILLS	98		
29 EMERSON AVE. N COLLEGE HILL 310 8 14 30 FARRAGUT RD. GREENHILLS 160 8 14 31 FELDMAN NORWOOD 283 8 25 32 GAMBIER AVE. GREENHILLS 153 8 9 33 GERMANIA AVE. FAIRFAX 256 8 4 34 GERMANIA AVE. FAIRFAX 413 8 22 35 GLENWAY WESTERN HILLS 377 8 11 36 GLOBE AVE NORWOOD 238 8 21	28	EDWOOD DR.	COLLEGE HILL	391	8	
30 FARRAGUT RD. GREENHILLS 160 8 14 31 FELDMAN NORWOOD 283 8 25 32 GAMBIER AVE. GREENHILLS 153 8 9 33 GERMANIA AVE. FAIRFAX 256 8 4 34 GERMANIA AVE. FAIRFAX 413 8 22 35 GLENWAY WESTERN HILLS 377 8 11 36 GLOBE AVE NORWOOD 238 8 21	29	EMERSON AVE.	N COLLEGE HILL	310	8	
32 GAMBIER AVE. GREENHILLS 153 8 9 33 GERMANIA AVE. FAIRFAX 256 8 4 34 GERMANIA AVE. FAIRFAX 413 8 22 35 GLENWAY WESTERN HILLS 377 8 11 36 GLOBE AVE NORWOOD 238 8 21	30	FARRAGUT RD.	GREENHILLS	160	8	
33 GERMANIA AVE. FAIRFAX 256 8 4 34 GERMANIA AVE. FAIRFAX 413 8 22 35 GLENWAY WESTERN HILLS 377 8 11 36 GLOBE AVE NORWOOD 238 8 21	31	FELDMAN	NORWOOD	283	8	25
33 GERMANIA AVE. FAIRFAX 256 8 4 34 GERMANIA AVE. FAIRFAX 413 8 22 35 GLENWAY WESTERN HILLS 377 8 11 36 GLOBE AVE NORWOOD 238 8 21	32	GAMBIER AVE.	GREENHILLS	153	8	
35 GLENWAY WESTERN HILLS 377 8 11 36 GLOBE AVE NORWOOD 238 8 21	33	GERMANIA AVE.	FAIRFAX	256	8	4
36 GLOBE AVE NORWOOD 238 8 21	34	GERMANIA AVE.	FAIRFAX	413	8	22
36 GLOBE AVE NORWOOD 238 8 21	35	GLENWAY	WESTERN HILLS	377	8	11
37 GLORE AVE NORWOOD 205 A	36	GLOBE AVE	NORWOOD	238	8	
37 GLODE AVE NORVYCOD 235 8 9	37	GLOBE AVE	NORWOOD	235	8	9
38 HAMILTON AVE. MT. HEALTHY 397 8 18	38	HAMILTON AVE.	MT. HEALTHY	397	8	18
39 HAMILTON AVE. MT. HEALTHY 256 8 10	39	HAMILTON AVE.	MT. HEALTHY	256	8	
40 HAMILTON AVE. MT. HEALTHY 300 8 13	40	HAMILTON AVE.	MT. HEALTHY	300	8	
41 HARMAR CT. GREEN TWP. 200 8 3	41	HARMAR CT.	GREEN TWP.			
42 HARRISON AVE GREEN TWP 143 8 3	42	HARRISON AVE	GREEN TWP			
43 HELEN ST. ELMWOOD PLACE 255 8 16	43	HELEN ST.	ELMWOOD PLACE			
44 INGRAM RD. GREEN HILLS 280 8 4	44	INGRAM RD.	GREEN HILLS			
45 INGRAM RD. GREEN HILLS 238 8 4	45	INGRAM RD.	GREEN HILLS			

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46	INMAN ST.	GREENHILLS	244	8	4
47	IRELAND ST.	GREENHILLS	295	8	5
48	IRELAND ST.	GREEN HILLS			
49			233	8	8
	IRELAND ST.	GREEN HILLS	197	8	7
50	IROQUOIS DR.	LOVELAND	134	8	2
51	JULEP LN.	GREENHILLS	260	8	.9
52	LaBOITEAUX AVE.	N. COLLEGE HILL	266	8	7
53	LANGDON FARM	PLEASANT RIDGE	130	8	3
54	MARIEMONT AVE.	MARIEMONT	221	8	
55	MARIEMONT AVE.				8
		MARIEMONT	270	8	7
56	MARVIN AVE.	MADIERA	201	8	9
57	MARVIN AVE.	MADIERA	202	8	10
58	ORCHARD LN.	PLEASANT RIDGE	187	8	5
59	ORCHARD LN.	PLEASANT RIDGE	188	8	5
60	SCOTTWOOD AVE.	ROSELAWN	154	8	8
61	SHELRICH CT.	GREEN TWP.	168	8	3
62	SIEBERN AVE.	SILVERTON			
			370	8	17
63	SIEBERN AVE.	SILVERTON	290	8	13
64	SIMPSON ST.	FAIRFAX	166	8	6
65	STEWART PARK DR	NORWOOD	247.5	8	14
66	STEWART PARK DR	NORWOOD	248.4	8	17
67	WAYSIDE AVE.	Mt.WASHINGTON	147	8	6
68	WAYSIDE AVE.	Mt.WASHINGTON	200	8	6
69	WOODLAWN	NORWOOD	179	8	
					15
70	EDITH AVE.	MADISONVILLE	189	10	6
71	EDITH AVE.	MADISONVILLE	208	10	11
72	OAK ST.	SILVERTON	315	10	9
73	PARROTT	DEER PARK	362	10	2
74	ALPINE	BLUE ASH	279.1	12	11
75	APLINE	BLUE ASH	130.8	12	0
76	BANBURY ST.	SPRINGFIELD TWP.	276	12	11
77	BANBURY ST.	SPRINGFIELD TWP.			
	BANBURY ST.		166	12	9
78		SPRINGFIELD TWP.	293	12	10
79	CALHOUN	CLIFTON	111	.12	8
80	CANNAS DR.	DELHI TWP.	163	12	0
81	CANNAS DR.	DELHI TWP.	126	12	2
82	CATALPA AVE.	N.COLLEGE HILL	323	12	3
83	CATALPA ST.	N.COLLEGE HILL	318	12	9
84	CATALPA ST.	N.COLLEGE HILL	290	12	1
85	CATHERINE AVE	LOCKLAND	184	12	5
86	CENTRAL AVE.				
		DOWNTOWN	24	12	0
87	COLUMBIA PKY.	EAST END	128	12	5
88	DEERWAY AVE.	KENWOOD	259	12	10
89	DON JOY DR.	BLUE ASH	301	12	7
90	E. OGDEN PLACE	DOWNTOWN	179	12	3
91	EBENEZER RD.	GREEN TWP.	272	12	15
92	ERNEST AVE	FAIRMOUNT	125	12	10
93	FAWNVISTA LA.	SHARONVILLE			
			151	12	2
94	FAWNVISTA LA.	SHARONVILLE	150	12	4
95	FINCH ALLEY	WALNUT HILLS	170	12	6
96	GLENDORA AVE.	CORRYVILLE	143	12	13

97	GREENLAND PLACE	ROSELAWN	349.5	12	17
98	GREENLAND PLACE	ROSELAWN	312.5	12	7
99	HIGHLAND AVE.	AVONDALE	101	12	5
100	HIGHLAND AVE.	AVONDALE	100	12	3
101	JOANNA PL.	PRICE HILL	266	12	10
102	JULMAR DR.	GREEN.TWP.	107	12	0
103	MENTOLA AVE.	DELHI TWP.	178	12	0
104	MIAMI HILLS DR	MADIERA	307	12	9
105	MONARDICT	COLUMBIA TWP	68	12	Ö
106	PROVIDENCE ST	WEST END	45	12	6
107	PROVIDENCE ST	WEST END	28	12	2
108	RED CEDAR DR	COLLEGE HILL	212	12	2
109	SAMOTH RIDGE	DELHI	200	12	7 -
110	SECTION RD	SPRINGFIELD TWP	241	12	8
111	SHARON RD	FOREST PARK	520	12	Õ
112	SHARON RD	FOREST PARK	100	12	1
113	SHARON RD	FOREST PARK	130	12	2
114	SMILEY AVE	SPRINGDALE	120	12	2
115	SMILEY AVE	SPRINGDALE	297	12	12
116	SMILEY AVE	SPRINGDALE	248	12	1
117	STATHEM AVE	WEST WOOD	304	12	18
118	THREE RIVERS PKWY	CLEVES	249	12	5
119	VICTORIA AVE	HYDE PARK	245	12	. 6
120	VICTORIA AVE	HYDE PARK	250	12	5
121	VINE ST	DOWNTOWN	169	12	11
122	WESTERN HILLS	GREEN TWP	145	12	1
123	WESTERN HILLS	GREEN TWP	127	12	9
124	BANK	ST BERNARD	244	15	16
125	PARVIS ALLEY	DOWNTOWN	49	15	7
126	RIDGECLIFF	PLEASANT RIDGE	191	15	2
127	RIDGECLIFF DRIVE	PLEASANT RIDGE	163	15	6
128	STEWART	SILVERTON	131	15	
129	STEWART	SILVERTON	211	15	2 1
130	STEWART RD	SILVERTON	218	15	0
131	STEWART RD	SILVERTON	197	15	2
132	VICTORIA AVE	HYDE PARK	251	15	
133	WILBUD DR	PRICE HILL			1
134	WOODLAWN AVE	PRICE HILL	141	15 15	4
135	FERNSIDE PL.	EVANSTON	20	15	0
136	GRANADA ST		68	18	0
137	JULMAR DR	MADISONVILLE	139	18	1
138	MARRYAT PL	GREEN TWP	200	18	4
139		PLEASANT RIDGE	153	18	3
140	OAK ST	WALNUT HILLS	129	18	12
141	PADDOCK RD	BOND HILL	11	18	5
	STETTINUS AVE	HYDE PARK	152	18	12
142	TREMONT ST	FAIRMOUNT	119	18	6
143	TREMONT ST	FAIRMOUNT	118	18	8
144	UC(NIPPERT STADIUM)		123	18	2
145	WARSAW AVE	PRICE HILL	143	18	16
146	BEECH AVE	PRICE HILL	184	22	4
147	BEECH AVE	PRICE HILL	29	22	0

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148 149 150	DRAKEWOOD AVE FAIRMOUNT AVE BEECH AVF	HYDE PARK FAIRMOUNT PRICE HILL	123 155 141	24 24 27	11 5
151 152	BEECH AVE GILSEY AVE	PRICE HILL PRICE HILL	64 233	27 27 36	2 2

Engineer's Estimate:

.\$3,000,000.00

^{*} See PART I Sec. 4.1 and PART V Sec. 1.4 of the Special Provisions and Specifications for Rehabilation of Existing Sanitary and Combined Sewers by Lining Process

1.3 Availability of Local Funds

The attached resolution has authorized and appropriated sufficient existing funds which are available immediately for local funds.

Alan P. Landis

September 30, 1993

Alan P. Landis

Date

MSD Comptroller

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The Board of County Commissioners of Hamilton County, Ohio met in regular session on the 29th day of September, 1993, with the following members present:

Mr. Chabot

Mr. Dowlin

Mr. Guckenberger

RESOLUTION

AUTHORIZING THE COUNTY ADMINISTRATOR TO APPLY FOR ISSUE 2 FINANCIAL ASSISTANCE FUNDS FOR THE METROPOLITAN SEWER DISTRICT OF GREATER CINCINNATI

WHEREAS, Issue 2 Financial Assistance Funds may be available from the Ohio Public Works Commission for sewer repair and improvement for the Metropolitan Sewer District, and

WHEREAS, it may be advantageous for the County to apply to District No. 2 for Issue 2 Financial Assistance Funds, and

WHEREAS, a single Resolution by this Board will suffice to authorize the Hamilton County Administrator to make any application and execute any contract, deemed economically advantageous by the County.

NOW, THEREFORE, BE IT RESOLVED, by the Board of County Commissioners of Hamilton County, Ohio, that the Hamilton County Administrator be and he hereby is authorized to make application to the Ohio Public Works Commission District No. 2 for Issue 2 Financial Assistance Funds, and

BE IT FURTHER RESOLVED, that this Board of County Commissioners hereby finds and determines that all formal actions relative to the adoption of this Resolution were taken in an open meeting of the Board of County Commissioners and that all deliberations of this Board of County Commissioners and of its committees, if any, which resulted in formal action were taken in meetings open to the public, in full compliance with applicable legal requirements, including Section 121.22 of the Ohio Revised Code.

ADOPTED at a regularly adjourned meeting of the Board of County Commissioners of Hamilton County, Ohio, this 29th day of September, 1993.

Mr.	Chabot	AYE	Mr.	Dowlin	AYE	Mr.	Guckenberger	AYE
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CERTIFICATE OF CLERK

IT IS HEREBY CERTIFIED that the foregoing is a true and correct transcript of resolutions adopted by the Board of County Commissioners in session the 29th day of September, 1993.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the Official Seal of the Office of the Board of County Commissioners of Hamilton County, Ohio, this 29th day of September, 1993

Jacqueline Panioto, Clerk

Board of County Commissioners

Hamilton County Ohio

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The Board of County Commissioners of Hamilton County, Ohio, met in regular session on the 1st day of September, 1993, with the following members present:

Mr. Chabot

Mr. Guckenberger

RESOLUTION

1993 CAPITAL IMPROVEMENT PROGRAM APPROPRIATION

WHEREAS, annually this Board approves the Capital Improvement Program for the Metropolitan Sewer District of Greater Cincinnati, and

WHEREAS, it has been determined sufficient unappropriated surplus funds are available for use by the Metropolitan Sewer District to temporarily finance construction costs prior to the issuance of long term revenue bonds.

NOW, THEREFORE, BE IT RESOLVED, by the Board of County Commissioners of Hamilton County, Ohio, that the sum of three million, eight hundred sixty-four thousand, nine hundred dollars (\$3,864,900.00) currently existing in unappropriated surplus funds available for use by the Metropolitan Sewer District in Capital Improvement Fund 704 maintained by the City of Cincinnati is hereby appropriated to pay costs incurred in connection with the following project:

S.S. No. 3359 Trenchless Technology

\$3,864,900.00

CIP 91-16

10000

BE IT FURTHER RESOLVED by the Board of County Commissioners of Hamilton County, Ohio as follows:

Section 1 The County may be expected to pay and/or incur costs with respect to the Project ("Prior Capital Expenditures") on or after the date of this resolution and prior to the issuance of the obligations (the "Obligations") which will finance the Project.

Section 2 The Board of County Commissioners hereby approves the use of the Obligations in the maximum principal amount of \$3,864,900.00 to finance the costs of the Project and declares its intent that any Prior Capital Expenditures made by the County will be made in anticipation of the issuance of such Obligations to reimburse said Prior Capital Expenditures. This declaration is made pursuant to Treas. Reg. Section 1.103-18 or any successor thereto.

Section 3 The County Administrator, the Director of the Metropolitan Sewer District, the Director of Finance of the City of Cincinnati, the County Auditor and/or Star Bank, N.A., as Trustee, each as applicable, are hereby authorized and directed to reimburse, not later than one year after the later of (i) the date of the expenditure or (ii) the date the item was placed in service, only those Prior Capital Expenditures made with respect to assets having a reasonably expected economic life of at least one year, and, in addition, eligible preliminary expenditures paid and incurred in connection with the Project from the Revenue Fund, Replacement and Improvement Account and/or the Surplus Account.

Section 4 The Board of County Commissioners finds and determines that, consistent with the County's budgetary and financial circumstances, it does not

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have funds currently available and does not expect to have funds available in the future that may be allocated on a long term basis, other than the proceeds of the Obligations, to finance the Prior Capital Expenditures.

Section 5 The Board of County Commissioners hereby directs the County Administrator, the Director of the Metropolitan Sewer District, the Director of Finance of the City of Cincinnati, the County Auditor and/or Star Bank, N.A., as Trustee, each as applicable, to take the following action at the time the Prior Capital Expenditures are reimbursed from proceeds of the Obligations only if said reimbursement relieves the proceeds used for reimbursement from any restrictions imposed by both legal documents under which the Obligations were issued and applicable state law: (1) evidence the reimbursement on the books and records maintained with respect to the Obligations, and (2) identify either the actual prior expenditure to be reimbursed or, in the case of reimbursement of a fund or account, the fund or account from which the expenditure was paid.

Section 6 The books, records and proceedings of the County with respect to this resolution shall be made reasonably available by the County, for inspection by the general public at the County's administrative office every business day during normal business hours commencing no later than 30 days after the passage of this resolution. Said books, records and proceedings of the County with respect to this resolution will continue to be reasonably available to the general public until the date of issuance of the Obligations.

BE IT FURTHER RESOLVED, that this Board of County Commissioners hereby finds and determines that all formal actions relative to the adoption of this Resolution were taken in an open meeting of the Board of County Commissioners and that all deliberations of this Board of County Commissioners and of its committees, if any, which resulted in formal action were taken in meetings open to the public, in full compliance with applicable legal requirements, including Section 121.22 of the Ohio Revised Code.

ADOPTED at a regularly adjourned meeting of the Board of County Commissioners of Hamilton County, Ohio, this 1st day of September, 1993.

Mr. Chabot AYE Mr. Dowlin ABSENAR. Guckenberger AYE

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COM'RS MIN. VOL. 251 SEP 1 1993 IMAGE 4015

S.S. PROJECT NO. 3359 TRENCHLESS TECHNOLOGY THE METROPOLITAN SEWER DISTRICT OF GREATER CINCINNATI

CERTIFICATE OF CLERK

To the Honorable Board of County Commissioners of Hamilton County

The undersigned, Jacqueline Panioto, the duly appointed, qualified and acting Deputy Clerk of the Board of County Commissioners of Hamilton County, Ohio, certifies that no appeal has been taken to Probate Court of Hamilton County, Ohio, from the Resolution to Proceed with Improvement of Sanitary Sewer Project No. 3359, Trenchless Technology, Metropolitan Sewer District of Greater Cincinnati, Hamilton County, Ohio, duly passed by this Board on the 1st day of September, 1993.

Jaqqueline Panioto, Acting Deputy Clerk

Board of County Commissioners

Hamilton County, Ohio

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METROPOLITAN SEWER DISTRICT OF GREATER CINCINNATI LOAN SUPPLEMENT STATEMENT OF METHOD OF REPAYMENT

Loan repayments are provided for in the customer user fees charged by the Metropolitan Sewer District (MSD). The Operating Budget approved by the Board of County Commissioners authorizes the payment. MSD does a rate study every other year to insure that the necessary revenues are being generated to sustain operations, pay debt service, and comply with borrowing covenants.

Alan P. Landis

September 30, 1993

Date

MSD Comptroller

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The Board of County Commissioners of Hamilton County, Ohio met in regular session on the 7th day of April 1993, with the following members present: Mr. Chabot

Mr. Dowlin

Mr. Guckenberger

Resolution fixing rates for sewerage service charges, surcharges, and industrial pretreatment charges for the use of sanitary and combined sewers and for sewage treatment in the Metropolitan Sewer District of Greater Cincinnati.

WHEREAS, the Board of County Commissioners of Hamilton County has since 1924, established sewer districts in accordance with Chapter 6117 of the Ohio Revised Code and constructed and otherwise acquired sanitary trunk sewers throughout the County, and as a result today owns, operates, and maintains a system of sanitary trunk sewers; and

WHEREAS, the Board of County Commissioners did, on February 1, 1955, consolidate all of the previously established sewer districts into a single district known as Hamilton County Sewer District No. 1; and

WHEREAS, the Board of County Commissioners did, on December 4, 1963, complete the consolidation of previously established sewer districts and expand the boundaries of Hamilton County Sewer District No. 1 to be coincident with the boundaries of the County; and

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WHEREAS, the Board of County Commissioners did, on April 10, 1968, change the name of the County Sewer district to "THE METROPOLITAN SEWER DISTRICT OF GREATER CINCINNATI"; and

WHEREAS, Section 6117.02 of the Ohio Revised Code provides that the Board of County Commissioners may establish a sewer service charge which shall be adequate to provide the cost of the management, maintenance, and operation of the sewers and the cost of sewage treatment and disposal, said sewer service charge to be paid by every person, firm, or corporation whose premises are served by a connection to a sanitary sewer; and

WHEREAS, the Board of County Commissioners did, on December 4, 1968, adopt a Resolution establishing a rate structure for sewerage service charges and surcharges, for sewer service in The Metropolitan Sewer District of Greater Cincinnati, effective January 1, 1969, which has been subsequently amended from time to time; and

WHEREAS, the Director of The Metropolitan Sewer District of Greater Cincinnati and of the Department of Sewers did, on March 29, 1993, submit a recommendation to revise the rate structure for sewerage service charges, surcharges, and industrial pretreatment charges; and

WHEREAS, the Board of County Commissioners did on March 31, 1993, conduct a public hearing on said rate structure;

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IMAGE 3/

NOW, THEREFORE, BE IT RESOLVED by the Board of County Commissioners of Hamilton County, Ohio:

SECTION 1. From and after April 14, 1993, every person, firm or corporation in The Metropolitan Sewer District of Greater Cincinnati, whose premises are served by a connection to a sanitary or combined sewer which discharges sewage, industrial wastes, water, or other liquids, either directly or indirectly into a County sanitary or combined sewer, shall be charged for the use of the sewers and for the treatment of sewage discharged therein at the following rates:

MINIMUM CHARGE

The sewerage service charge shall consist of a minimum charge and a commodity charge.

The minimum charge shall be based on the size of the water meter used to serve the premises, or the size of the premises served, as determined by the number of units therein, whichever results in the larger minimum charge.

The size of the premises shall be determined by the total number of residential and/or commercial and industrial units that comprise the premises.

Such minimum charge shall include the charge for the first 500 cubic feet of water used in the case of monthly bills; and the first 900 cubic feet of water used, in the case of quarterly bills.

The minimum charge rates shall be as follows:

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Meter Size inches	Number of Family Units	Monthly Bills \$	Quarterly Bills \$
5/8 3/4 1 1-1/2 2 3 4 6 8 10	1 2 or 3 4 or 5 6 thru 12 13 thru 20 21 thru 50 51 thru 115 116 thru 200 Over 250	14.00 16.75 21.50 33.50 46.00 114.00 189.00 370.00 550.00 739.00 860.00	28.75 37.05 51.00 87.00 123.00 319.00 528.00 1,042.00 1,556.00 2,079.00 2,401.00

For trailer parks the number of family units shall be 75 percent (75%) of the available occupancy.

For hotels and motels the number of family units shall be 50 percent (50%) of the available occupancy.

For commercial establishments each two sets, or part thereof, of sanitary facilities shall be counted as one family unit. A set of sanitary facilities shall be any grouping of water using plumbing fixtures whose total instant demand is not greater than the total instant demand of five, one-half inch, water faucets. Where commercial or manufacturing facilities require more water than required for sanitary



purposes, the minimum charge shall be not less than the minimum charge for a meter one size smaller than the branch serving the premises.

COMMODITY CHARGE

The Commodity Charge shall be based on the quantity of water used on the premises served as same is measured by a water meter or meters therein used, which meters must be acceptable to the City of Cincinnati.

The Commodity Charge shall be as follows:

Monthly Bills

For each 100 cubic feet consumed per month in excess of 500 cubic feet but not in excess of 5,000 cubic feet - \$1.43 per 100 cubic feet.

For each 100 cubic feet consumed per month in excess of 5,000 cubic feet - \$1.16 per 100 cubic feet.

Quarterly Bills

For each 100 cubic feet consumed per quarter in excess of 900 cubic feet but not in excess of 15,000 cubic feet - \$1.43 per 100 cubic feet.

For each 100 cubic feet consumed per quarter in excess of 15,000 cubic feet - \$1.16 per 100 cubic feet.

For residential water service accounts (one and two family residences), a quarterly minimum and commodity charge shall be based upon water used during a winter quarterly billing period; said winter period being the quarterly billing period most closely corresponding to usage during the months of October through April. Said charges shall be payable with each bill rendered throughout the year.

SECTION 2. For customers having high strength waste discharge, the surcharge, which is in addition to the metered use charge, shall be computed on the following basis:

SURCHARGE:

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Suspended Solids (SS)

\$0.000796 per 100 cubic feet for each mg/l of SS strength above 300 mg/l.

Biochemical Oxygen Demand (BOD)

\$0.001359 per 100 cubic feet for each mg/l of BOD strength above 240 mg/l.

Nitrogenous Oxygen Demand (NOD) \$0.001188 per 100 cubic feet for each mg/l of Total Kjeldahl Nitrogen (TKN) strength above 25 mg/l.

Provided, however, that to the extent the strength of a pollutant is less than 80 percent (80%) of the corresponding value for normal strength sewage, a credit shall be allowed as an offset against surcharge otherwise due. The credit shall be calculated by multiplying the herein above specified surcharge rate for the pollutant in question times the difference between actual pollutant concentration in mg/l and 80 percent (80%) of the corresponding value for normal sewage. No credit shall be allowed in excess of surcharge otherwise due.

SECTION 3. All users required to apply for and obtain a wastewater discharge permit or which are subject to federal pretreatment standards, as specified in the MSD Rules and Regulations, shall be subject to the payment of a pretreatment charge(s), as determined by the Director. Said pretreatment



charge(s) shall be sufficient to recover, in whole or in part, the costs for the MSD Pretreatment Program including investigations, record keeping, administration, and monitoring of industrial waste discharges to the system. Each industrial user shall pay a pretreatment charge(s) as follows:

INDUSTRIAL PRETREATMENT CHARGE:

Annual Fee - \$800 per annum

Monitoring Charge - \$5,500 maximum per monitoring event

SECTION 4. Any user which discharges any toxic pollutants which cause an increase in the cost of managing effluent or sludge from the District's treatment system shall pay such increased costs.

SECTION 5. That the sewerage service charges, surcharges, and industrial pretreatment charges shall be applied in accordance with the provisions of the "Rules and Regulations Governing the Maintenance, Operation, and Use of Sanitary and Combined Sewers in The Metropolitan Sewer District of Greater Cincinnati" as adopted by the Board of County Commissioners and as may be modified from time to time.

SECTION 6. All users of the sewage system shall be notified at least annually as to:

- (a) The rate schedule in effect.
- (b) That part of the total charges attributable to user charges for sewage treatment service.

SECTION 7. That the sewerage service charges and surcharges stipulated herein shall be billed on the water bill and shall be payable to the Cincinnati Water Works at the same time as the water bills, or they may be billed and collected by such governmental agencies as are designated by and as are under agreement with the Board of County Commissioners. Charges not paid within the time prescribed shall be certified, together with a penalty of 10 percent (10%) to the County Auditor and collected in accordance with Section 6117.02 of the Ohio Revised Code.

SECTION 8. That industrial pretreatment charges and charges to users for special equipment, materials, and services shall be payable in the same manner as sewerage service charges, or by means of a separate billing.

SECTION 9. Quarterly sewerage service charge and surcharge bills mailed May 14 through June 13, and June 14 through July 13, 1993, shall be prorated at the existing and new rates; those mailed July 14, 1993, and thereafter shall be calculated entirely at the new rates. Monthly sewerage service charge and surcharge bills mailed May 14, 1993, and thereafter shall be calculated at the new rates.

SECTION 10. The Resolution adopted by the Board of County Commissioners on April 24, 1991, fixing rates and charges for sewer service in The Metropolitan Sewer District of Greater Cincinnati is hereby repealed.

SECTION 11. That this Board of County Commissioners hereby finds and determines that all formal actions relative to the adoption of this Resolution were taken in an open meeting of the Board of County Commissioners and that all deliberations of this Board of County Commissioners and of its

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committees, if any, which resulted in formal action, were taken in meetings open to the public, in full compliance with applicable legal requirements, including Section 121.22 of the Ohio Revised Code.

ADOPTED at a regularly adjourned meeting of the Board of County Commissioners of Hamilton County, Ohio, this 7th day of April 1993.

Mr. Chabot, AYE

Mr. Dowlin, AYE

Mr. Guckenberger, AYE

CERTIFICATE OF CLERK

IT IS HEREBY CERTIFIED that the foregoing is a true and correct transcript of a Resolution adopted by the Board of County Commissioners in session the 7th day of April 1993.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the Official Seal of the Office of County Commissioners of Hamilton County, Ohio, this 7th day of April 1993.

Jacqueline Panioto, Acting Deputy Clerk

Board of County Commissioners

Hamilton County, Ohio

REPORT

AUDIT OF FINANCIAL STATEMENTS

for

THE METROPOLITAN SEWER DISTRICT OF GREATER CINCINNATI

for the years ended December 31, 1992 and 1991

P.O. BOX 1140 • Columbus, Ohio 43266 0040 • [614] 456-4514

Board of County Commissioners Hamilton County Cincinnati, Ohio 45202

We have reviewed the independent auditor's reports of the Metropolitan Sewer District of Greater Cincinnati prepared by Foxx & Company, and the working papers related thereto for the fiscal year ended December 31, 1992. Based upon this review, we have accepted these reports in lieu of the audits required by Section 117.11, Revised Code. We did not audit the accompanying financial statements and accordingly we are unable to express, and do not express, an opinion on them.

THOMAS E. FERGUSON, CFE AUDITOR OF STATE

July 19, 1993

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The Honorable Board of County Commissioners County of Hamilton, Ohio

INDEPENDENT AUDITORS' REPORT

We have audited the balance sheets of the Metropolitan Sewer District (District) of Greater Cincinnati, Cincinnati, Ohio, as of December 31, 1992 and 1991, and the related statements of revenues and expenses, changes in equity, and cash flows for the years then ended. These financial statements are the responsibility of the District's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the financial statements referred to in the first paragraph present fairly, in all material respects, the financial position of the Metropolitan Sewer District of Greater Cincinnati as of December 31, 1992 and 1991, and the results of its operations and its cash flows for the years then ended in conformity with generally accepted accounting principles.

FOXX & Company

April 23, 1993 Cincinnati, Ohio

BALANCE SHEETS

December 31, 1992 and 1991

ASSETS				
		<u> 1992</u>		<u> 1991</u>
Current assets:			_	
Cash and cash equivalents	\$	9,420,000	Ş	8,900,000
Grants receivable		398,000		685,000
Accounts receivable (net of allowance for				
doubtful accounts: 1992 - \$1,130,000				
1991 - \$1,130,000): (Note 3)		C E40 000		9,749,000
Sewerage charges and surcharges unbilled		6,549,000		6,041,000
Sewerage charges and surcharges billed		5,754,000 305,000		574,000
Other		25,000		49,000
Settlements receivable Inventory of supplies, materials and fuel		214,000		361,000
THAGHEOLA OF EGABLITES, MUSCELLETP SUG IGET	_	221/333	_	
Total current assets	_	22,665,000		26,359,000
Restricted assets:				
Cash and cash equivalents				
held by City of Cincinnati:				15 000 000
Construction account		11,299,000		15,283,000
Amount to be transferred to surplus		11 710 000		12,960,000
account		11,718,000		12,300,000
Investments held by Trustee:		18,749,000		17,930,000
Reserve account		5,000,000		5,000,000
Replacement and improvement account		1,509,000		1,705,000
Bond account Surplus account		16,534,000		31,002,000
Surprus account		10/33//003	_	42/
Total restricted assets		64,809,000		83,880,000
			_	
Property, plant and equipment:				
Land		2,521,000		2,111,000
Buildings and structures		354,007,000		343,320,000
Processing systems		191,668,000		186,182,000
Office and service equipment		13,573,000		12,841,000 35,855,000
Construction in progress	-	57,255,000 619,024,000	-	580,309,000
		(177,332,000)		(160,041,000
Less: Accumulated depreciation	_	(1/7,332,000)	-	(100,041,000
Total property, plant and equipment, net		441,692,000	_	420,268,000
Other assets:				
Unamortized financing costs		4,098,000		4,413,000
Settlements receivable		1,316,000		1,341,000
Other	_	3,868,000	•	4,070,000
mate 1 other agents		9,282,000		9,824,000
Total other assets	_	2,202,000	-	3,02.,000
Total assets	\$	538,448,000	5	540,331,000

BALANCE SHEETS (continued)

December 31, 1992 and 1991

LIABILITIES AND EQUITY	<u>1992</u>	<u>1991</u>
Current liabilities: Current portion of long-term debt Accounts payable and accrued liabilities	\$ 7,187,000 <u>4,738,000</u>	\$ 5,363,000 3,347,000
Total current liabilities	11,925,000	8,710,000
Payable from restricted assets: Construction account Bond account Total payable from restricted assets	3,420,000 1,023,000 4,443,000	3,922,000 1,044,000 4,966,000
Long-term debt	. 185,022,000	192,398,000
Total liabilities	201,390,000	206,074,000
Equity:		
Contributions in aid of construction Retained earnings	183,855,000 153,203,000	186,872,000 147,385,000
Total fund equity	_337,058,000	_334,257,000
Total liabilities and equity	\$538,448,000	<u>\$540,331,000</u>

STATEMENTS OF REVENUES AND EXPENSES

for the years ended December 31, 1992 and 1991

	<u>1992</u>	<u> 1991</u>
Operating revenues: Sewerage service charges Sewerage surcharges Other revenues	\$66,669,000 9,908,000 3,152,000	\$67,264,000 9,894,000 2,905,000
Total operating revenues (Note 3)	79,729,000	80,063,000
Operating expenses: Personnel services Utilities, fuel and supplies Depreciation and amortization Purchased services Other expenses	31,118,000 11,318,000 18,110,000 11,479,000 2,605,000	30,278,000 10,446,000 15,654,000 10,172,000 2,507,000
Total operating expenses	74,630,000	69,057,000
Income from operations .	5,099,000	11,006,000
Other income (expense): Interest income Sundry Loss on disposal of property, plant and equipment Interest expense	2,876,000 296,000 (1,240,000) (8,173,000)	3,769,000 124,000 (2,152,000) (7,574,000)
Total other income (expense)	(6,241,000)	(5,833,000)
Income (loss) before extraordinary item	(1,142,000)	5,173,000
Extraordinary item (Note 6)		(6,957,000)
Net loss	\$(1,142,000)	<u>\$(1,784,000</u>)

STATEMENTS OF CHANGES IN EQUITY

for the years ended December 31, 1992 and 1991

	Contributions in Aid of Construction	Retained <u>Earnings</u>	<u>Total</u>
Balances, January 1, 1991	\$189,403,000	\$142,308,000	\$331,711,000
Net loss	-	(1,784,000)	(1,784,000)
Additions to contributions in aid of construction	4,330,000	-	4,330,000
Amortization of contributions in aid of construction	(6,861,000)	6,861,000	
Balances, December 31, 1991	186,872,000	147,385,000	334,257,000
Net loss	.	(1,142,000)	(1,142,000)
Additions to contributions in aid of construction	3,943,000	_	3,943,000
Amortization of contributions in aid of construction	(6,960,000)	6,960,000	
Balances, December 31, 1992	\$183,855,000	\$153,203,000	<u>\$337,058,000</u>

STATEMENTS OF CASH FLOWS

for the years ended December 31, 1992 and 1991

INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS

THORAND (SECTION)				
	<u>1992</u>	<u>1991</u>		
0 70001V00 FTON CH3COMETS	\$ 80,064,000	\$ 75,345,000		
Cash received from cash received from suppliers for goods and services Cash payments for personnel costs Other operating revenues	(24,731,000) (30,610,000) 3,421,000	(23,903,000) (30,070,000) 3,116,000		
Net cash provided by operating activities	28,144,000	24,488,000		
Cash flows from capital and related				
financing activities:	_	89,375,000		
Sale of revenue bonds Defeasance of revenue bonds		(51,096,000)		
Principal and interest payments - long-	(18,609,000)	(18,961,000)		
Acquisition and construction of	(36,977,000)	(36,408,000)		
capital assets Grants and contributions	3,943,000	3,784,000 533, <u>000</u>		
Proceeds from sale of equipment	49,000			
Net cash used for capital and related financing activities	(51,594,000)	(12,773,000)		
Cash flows from investing activities:				
Proceeds from sale (purchase) or	10,086,000	(18,635,000)		
government securities Interest on investments	4,899,000	6,532,000		
Net cash provided (used) from investing activities	14,985,000	(12,103,000)		
Net decrease in cash and cash equivalents	(8,465,000)	(388,000)		
g-t and gach equivalents at January 1	60,385,000	60,773,000 \$ 60,385,000		
Cash and cash equivalents at December 31	\$ 51,920,000			
RECONCILIATION OF OPERATING INCOME TO NET CASH PROVIDED BY OPERATING ACTIVITIES				
Operating income	\$ 5,099,000	\$ 11,006,000		
Adjustments to reconcile operating income to net cash provided by operating activities: Depreciation and amortization Allowance for doubtful accounts other	18,110,000	15,654,000 155,000 (37,000)		
ghange in assets and liabilities:	3,758,000	(1,558,000)		
Decrease (increase) in receivables	147,000	201,000		
Decrease in inventory Increase in accrued compensation	361,000	207,000		
Increase (decrease) in operating	671 000	(1,137,000)		
accounts payable	671,000 (2,000)	(3,000)		
Increase in prepaid expenses	23,045,000	13,482,000		
Total adjustments Net cash provided by operating activities	\$ 28,144,000	\$ 24,488,000		
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NOTES TO FINANCIAL STATEMENTS

for the years ended December 31, 1992 and 1991

1. Summary of Significant Accounting Policies

A. Organization

The Metropolitan Sewer District of Greater Cincinnati (MSD) was established pursuant to an agreement dated May 1, 1968, between the Board of Commissioners of Hamilton County and the City of Cincinnati. Under a contract with the City of Cincinnati, the Board designated the City as its agent for the maintenance and operation of MSD. The annual budget, prepared on the cash basis of accounting, is approved by the Board and administered by the City. Budgetary control is exercised at the activity level.

B. Basis of Accounting

The accompanying financial statements were prepared on the accrual basis of accounting, whereby revenues and expenses are recognized in the period earned or incurred.

C. Investments

Investments are recorded at the lower of cost or market as of the balance sheet date, on an aggregate basis.

D. Inventory

Supplies, materials, and fuel are stated at the lower of cost or market on a first-in, first-out (FIFO) basis.

E. Property, Plant and Equipment

Property, plant and equipment are stated at historical cost for assets acquired after MSD's inception in 1968. Assets acquired prior to 1968 and not identifiable with specific historical costs are not included in the property, plant and equipment balance. Assets acquired by MSD through contributions, such as contributions from land developers and Federal and state grants, are capitalized and recorded in the plant records at the contributors' reported

NOTES TO FINANCIAL STATEMENTS

for the years ended December 31, 1992 and 1991

cost. Construction costs include interest capitalized on debt during the period of construction and the cost of in-force labor.

Depreciation expense is computed on the straight-line method over the estimated useful lives of the respective assets. The estimated lives are as follows:

Buildings and structures 40 years
Processing systems 25 years
Office and service equipment 5 to 15 years

Depreciation expense on fixed assets acquired through contributions is reported as an offset against contributions in aid of construction in fund equity. Any gain or loss arising from the disposal of fixed assets has been credited or charged to income.

F. Unamortized Financing Costs

The unamortized financing costs include bond discount and consulting and attorney fees incurred in connection with the revenue bond obligations. These amounts are being amortized on the interest method over the lives of the revenue bonds.

G. Statement of Cash Flows

For purposes of the Statement of Cash Flows, all highly liquid investments (including restricted assets) with a maturity of three months or less when purchased are considered to be cash equivalents.

H. Pension Plans

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Pension costs reflect a percentage of employees' gross pay, as defined by the terms of MSD's pension plans. MSD's policy is to fund pension costs accrued.

NOTES TO FINANCIAL STATEMENTS

for the years ended December 31, 1992 and 1991

I. Insurance

MSD participates in Ohio Workers' Compensation and Ohio State Unemployment programs.

2. Cash and Investments

Monies held by MSD, other than bond funds held by trustees, are invested on MSD's behalf by the City of Cincinnati (the City). Pursuant to the Cincinnati Municipal Code, allowable investments specifically include: (a) bonds and other obligations of the City; (b) bonds, notes or other obligations on securities of or guaranteed by the United States or any Federal government agency; (c) bonds and other obligations of the State of Ohio; (d) Bonds of any municipality of the State of Ohio; (e) certificates of deposit of banks in accordance with Section 135.18 of the Ohio Revised Code; and (f) repurchase agreements with banks of the City in accordance with Section 135.14 of the Ohio Revised Code.

Cash and investments consist of the following at December 31, 1992 and 1991:

	December 31, 1992		December 31, 1991	
	Cash and Cash <u>Equivalents</u>	<u>Investments</u>	Cash and Cash <u>Equivalents</u>	<u>Investments</u>
Deposits: Amounts held by City of Cincinnati	\$32,437,000	S -	\$37,143,000	\$ -
Investments held by Trustees: U.S. Government securities	-	22,309,000	-	32,395,000
Trust funds liquid asset treasury portfolio	19,483,000	Market State Control of the Control	23,242,000	:
Total cash and investments	\$51,920,000	<u>\$22,309,000</u>	<u>\$60,385,000</u>	\$32,395,000

The amounts held by the City are collateralized as part of the City's cash and investment balances. Bank balances of the City are covered by Federal depository

NOTES TO FINANCIAL STATEMENTS

for the years ended December 31, 1992 and 1991

insurance or collateral held by the Cincinnati Branch of the Federal Reserve Bank of Cleveland or the City's agent in the City's name.

Investments held by trustees are uninsured and unregistered and are held by the financial institution's trust department in MSD's name.

3. Accounts Receivable

Accounts receivable as of December 31, 1992 and 1991, consisted of the following:

·	December 31, 1992	December 31, 1991
Sewerage charges and surcharges-unbilled	\$ 6,549,000	\$ 9,749,000
Sewerage charges and surcharges-billed	6,884,000	7,171,000
Other	305,000	574,000
Less allowable for doubtful accounts	(1,130.000)	(1,130,000)
Total	<u>\$12,608,000</u>	<u>\$16,364,000</u>

The method of calculating the December 31, 1992 sewerage and surcharges-unbilled was changed to reflect a more accurate estimate. This change had the effect of reducing the December 31, 1992, accounts receivable amount for sewerage charges and surcharges-unbilled by \$3,087,000 from the amount which would have been recognized had prior year estimating calculations been used. The reduction to the year end receivable reduced 1992 operating revenues from \$82,816,000 to \$79,729,000 and reduced net income from \$1,945,000 to a net loss of \$1,142,000.

4. Restrictions on Assets

Land acquired for MSD's use is titled to either the City of Cincinnati or Hamilton County. The cost of this land has been recorded on the books of MSD since it has the full benefits of the land as an economical resource.

In August 1985, the Federal District Court entered a consent order in an action with MSD and others (see Note 10). In complying with the consent order, MSD is required to maintain amounts on deposit in an environmental security account. Expenditures from this account must be approved by the U.S. Environmental Protection Agency. The balance of this account, which is included in other assets, was \$773,000 and \$743,000 at December 31, 1992 and 1991, respectively.

The Trust Agreement for the 1991, 1986, and 1985 Revenue Bonds (see Note 5) requires the establishment of certain trust accounts including a Bond Account, Bond

NOTES TO FINANCIAL STATEMENTS

for the years ended December 31, 1992 and 1991

Reserve Account, Replacement and Improvement Account, and a Surplus Account to be held by the Trustee. The Bond Account will be used to accumulate periodic principal and interest payments. The Bond Reserve Account will be funded in an amount equal to the highest annual future debt service requirement. The Replacement and Improvement Account will be maintained with a balance of \$5,000,000. The Surplus Account is available to be used for any other Sewer System purpose. The Trust Agreement also requires the creation of a Construction Account to be held by the City to pay for project costs.

5. Long-Term Debt

As of December 31, 1992 and 1991, long-term debt consisted of the following:

(In Thousands)

	Principal Issue	Interest Rate	Maturity Date	1992 Principal Outstanding	1991 Principal Outstanding
Ohio Water Authority Contracts	\$41,830	2.00-7.49	2019	\$ 12,406	\$ 14,104
Series A Revenue Bonds					
1985	63,800	6.00-9.50	2005	7,570	9,730
1986	85,020	4.90-7.50	2011	81,180	81,915
1991	90,950	4.80-6.70	2013	89,340	90,270
Loveland Sewer Distric Ohio Water and Sewer	t 200	5.75	2000	75	80
Rotary Commission				1,638	<u>1,662</u>
				192,209	197,761
Less current maturities	3	•		7,187	<u>5,363</u>
Long-term debt				\$185,022	<u>\$192,398</u>

NOTES TO FINANCIAL STATEMENTS

for the years ended December 31, 1992 and 1991

Principal payments on long-term debt for the subsequent five years and thereafter are as follows:

1993	\$ 7,187,000
1994	5,699,000
1995	5,996,000
1996	6,320,000
1997	6,486,000
Thereafter	<u>160,521,000</u>

\$192,209,000

Effective February 26, 1991, MSD issued \$90,950,000 County of Hamilton, Ohio, 1991 Series A Sewer System Improvement and Refunding Revenue Bonds dated January 15, 1991. The proceeds from the 1991 Bonds were used to permanently fund certain previous capital expenditures, provide funds for new projects, defease a portion of the 1985 Series A bond issue (See Note 6), fund the new bond reserve requirement, and pay the cost of issuance. The 1991 bonds are special obligations of the District payable solely from the net revenues of the District and are issued on a parity with the 1985 and 1986 Series A bonds, secured equally and ratably under the Trust Agreement.

Effective May 29, 1986, MSD issued \$85,020,000 County of Hamilton, Ohio Sewer System Revenue Bonds, 1986 Series A (1986 Bonds). The proceeds from the 1986 Bonds were used to fund certain construction projects, establish various trust funds required by the Bond Indenture, and to pay certain fees and expenses incurred with the issuance of the bonds.

The 1985 and 1986 bonds are secured by a Trust Agreement dated October 1, 1985, as supplemented by a First Supplemental Trust Agreement dated April 1, 1986, between the Trustee, the County, and for certain limited purposes, the City of Cincinnati. The 1985 and the 1986 bonds are on a parity and are equally and ratably secured by a pledge of the Net Revenues (as defined by the debt agreements) of MSD. The 1985 Bonds mature at amounts ranging from \$2,330,000 in 1993 to \$2,725,000 in 1995 (after refunding by the 1991 Series A bonds). The 1986 Bonds mature at amounts ranging from \$775,000 in 1993 to \$13,000,000 in 2011. The 1991 Bonds mature at amounts ranging from \$985,000 in 1993 to \$15,335,000 in 2013. The 1991, 1986, and 1985 Bonds may be redeemed prior to their maturities in accordance

NOTES TO FINANCIAL STATEMENTS

for the years ended December 31, 1992 and 1991

with provisions of the bond resolutions. The redemption prices for the bonds include declining premiums from 2 percent and 3 percent of principal, respectively.

Under the terms of the amended revenue bond trust indenture, MSD has agreed to certain covenants, among other things, to restrict additional borrowing, fix and maintain rates sufficient to meet debt service requirements, and maintain specified fund balances under trust agreements.

All contracts between the Ohio Water Development Authority (OWDA) and the Metropolitan Sewer District require MSD to prescribe and charge such rates for sewer usage which are sufficient (after expenses of operation and maintenance) to pay principal and interest on OWDA contracts. The principal is repayable in equal semi-annual installments to maturity.

Advances from Ohio Water and Sewer Rotary Commission represent tap-in fees and acreage assessments to be forwarded to the Commission upon collection from customers. Such advances do not bear interest unless they are determined to be in default.

For the years 1992 and 1991, interest costs incurred totaled \$13,214,000 and \$13,393,000, respectively, of which \$5,041,000 and \$5,819,000 were capitalized as part of the cost of MSD's additions to property, plant, and equipment.

The Revenue Serial bond issues as discussed above contain covenants which require the District to maintain a level of debt service coverage. The following calculation reflects the District's debt service coverage.

	<u> 1992</u>	<u> 1991</u>
Revenues:		
Total operating revenues (See Note 3)	\$79,729,000	\$80,063,000
Interest income	2,876,000	3,769,000
Capitalized interest income	2,023,000	2,895,000 86,727,000
Total pledged revenues	84,628,000	00,727,000
Total operating and maintenance expenses less depreciation and amortization	56,520,000	53.403.000
ress debrechation and amoretration	30,320,000	
Net income available for debt service	\$28,108,000(a)	\$33,324,000(a)
Principal and interest requirements on		
revenue bonds	<u>\$16,358,000</u> (b)	\$15,826,000(b)
Principal and interest requirements on		A10 001 000/-1
all obligations	\$18,555,000(c)	\$18,201,000(c)
Debt service coverage:	1 77	2 11
Revenue bonds (a)÷(b)	<u>1.72</u>	<u>2.11</u>
All obligations (a)÷(c)	1.51	<u>1.83</u>
ALL ODITAGETORS (a)-(c)	=	
Basic coverage required on bonds	1.25	1.25
		

NOTES TO FINANCIAL STATEMENTS

for the years ended December 31, 1992 and 1991

6. Extraordinary Item - Defeased Debt

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Defeasements During 1991. On February 26, 1991, the District issued \$90,950,000 1991 Series A Sewer System Improvement and Refunding Revenue bonds dated January 15, 1991, with an average interest rate of 6.54 percent. A portion of the proceeds from the bond issue was used to purchase U.S. Government Securities to advance refund \$45,230,000 of outstanding 1985 Series A bonds with an average interest rate of 9.39 percent. Those securities were deposited in an irrevocable trust with an escrow agent to provide for all future debt service payments on the 1985 Series A Bonds maturing after December 1, 1995. As a result, the 1985 Series A Bonds maturing after December 31, 1995, are considered to be defeased and the liability for those bonds has been removed from the balance sheet. At December 31, 1992 and 1991, the amount of defeased debt outstanding amounted to \$45,230,000.

Although the advance refunding resulted in the recognition of an accounting loss of \$6,957,000 for the year ended December 31, 1991, which is reflected on the Statement of Revenues and Expenses as an extraordinary item, the District in effect reduced its aggregate debt service payments by \$11.7 million and obtained an economic gain (difference between the present values of the old and new debt service payments) of \$3.3 million.

Other Defeasements. In prior years, MSD defeased various general obligation serial bonds and revenue serial bonds through refinancing and operations. Separate irrevocable trust funds were established and funded to fully service the defeased debt until the debt is called or matures. For financial reporting purposes, the debt has been considered defeased and is not included in the financial statements. At December 31, 1992, and 1991 the amount of prior year's defeased debt outstanding amounted to \$12,060,000 and \$15,053,000, respectively.

7. Contributions in Aid of Construction

Contributions have been received from the OWDA and the United States Government in accordance with agreements transacted between MSD and these two entities. The City of Cincinnati and Hamilton County provided working capital to MSD upon formation, and those capital contributions are included in the amounts

NOTES TO FINANCIAL STATEMENTS

for the years ended December 31, 1992 and 1991

below. Other contributions have been received in connection with the expansion of sewerage services.

As of December 31, 1992 and 1991, net contributions in aid of construction consisted of the following:

	1992	<u>1991</u>
United States Government Grants City of Cincinnati Ohio Water Development	\$ 129,722,000 68,300,000	\$ 129,328,000 68,300,000
Authority Grants Customers Hamilton County	43,585,000 52,224,000 	43,585,000 48,674,000 1,738,000 291,625,000
Less accumulated amortization of contributions in aid of construction	(111,714,000) \$183,855,000	(104,753,000) \$_186,872,000

8. Pension and Retirement

All MSD full-time employees participate in either the Retirement System of the City of Cincinnati (City System) or the Public Employees' Retirement System administered by the State of Ohio (State PERS). Each plan is a cost-sharing, multiple-employer, public employee retirement system. The payroll for employees covered by the plans for the year ended December 31, 1992, was \$23,678,000 and \$867,000 for the City System and State PERS, respectively. MSD's total payroll was \$24,578,000. The payroll for employees covered by the plans for the year ended December 31, 1991, was \$22,612,000 and \$848,000 for the City System and State PERS, respectively. MSD's total payroll for 1991 was \$23,574,000.

Income sources for each of the pension systems include both employee and employer contributions as well as income earned on investments. Employer contributions to the pension funds are current and fully met as required by law. Annual contributions

NOTES TO FINANCIAL STATEMENTS

for the years ended December 31, 1992 and 1991

to all pension systems include a provision for past service costs to properly fund pension and other benefits payable on account for creditable service.

The following table lists the employer and employee contribution rates and amounts paid by MSD for each retirement system for the year ended December 31, 1992

(In Thousands)

	Employer		Employee	
	<u>Percent</u>	<u>Amount</u>	<u>Percent</u>	Amount
City of Cincinnati Retirement System	16.75%	\$3,959*	7.0%	\$1,657
Public Employees Retirement System	13.55%	118**	8.5%	74

- * Employer amount includes health care costs which were included in the calculation of the pension benefit obligation.
- ** A portion of the PERS employer amount is used to fund a health care program which is not part of pension benefit obligation calculations.

The "pension benefit obligation" (PBO) is a standardized disclosure measure of the present value of pension benefits, adjusted for the effects of projected salary increases and step-rate benefits estimated to be payable in the future as a result of the employee service to date. The measure, which is the actuarial present value of credited projected benefits, is intended to help users assess each system's funding status on a going-concern basis, progress made in accumulating sufficient assets to pay benefits when due, and make comparisons among and assess retirement systems and employers. The measure is independent of the actuarial funding method used to determine contributions to the retirement system. The systems do not make separate measurements of assets and pension benefit obligation for individual employers.

NOTES TO FINANCIAL STATEMENTS

for the years ended December 31, 1992 and 1991

Listed below, for each system, is the pension benefit obligation for each system as a whole, net assets available for benefits, and the unfunded pension benefit obligation. These were determined through actuarial evaluations performed as of December 31, 1992, for the City System and December 31, 1991, for the PERS, (latest information available).

(In Thousands)

	Pension Benefit Obligation (PBO)	Net Assets Available	Unfunded PBO
City of Cincinnati Retirement System	\$ 1,109,333	\$ 1,037,351	\$ 71,982
Public Employees Retirement System	\$19,801,100	\$18,501,200	\$1,299,900

City of Cincinnati Retirement System. The service retirement allowance vests after five years of creditable service. Medical care benefits vest after fifteen years of creditable service or after reaching age sixty with five years of creditable service. Any member in service may retire upon attaining age sixty, regardless of length of membership service if he was enrolled prior to January 1, 1969, or with at least five years of membership service if enrollment occurred at January 1, 1969, or later, or upon completing five years of creditable service before age sixty members may retire with a retirement allowance commencing at age sixty, provided, however, at the time of election of the deferred annuity, there is no loan outstanding against his contributions.

The annual retirement allowance consists of an annuity provided by the number equal in value to contributions with interest at the time of retirement and a pension, which together with annuity, produces a total annual retirement allowance equal to 2 percent of the average highest compensation multiplied by the number of years of membership service. The System also provides death and disability benefits. These benefit provisions and all other requirements are established by the Cincinnati Municipal Code.

Each member contributes at a rate of 7 percent of his salary until his retirement. MSD makes annual contributions based on a percentage of the salaries of all

NOTES TO FINANCIAL STATEMENTS

for the years ended December 31, 1992 and 1991

members which is determined actuarially at each year end for the next year. The contribution rate for 1992 was 16.75 percent consisting of 6.61 percent for the normal contribution and 10.14 percent for the accrued liability contribution.

The City System has 6,320 active contributing participants of which 734 are MSD employees. For 1992 MSD's contribution was 13.8 percent of the total employer contribution.

The following significant actuarial assumptions used to compute the pension benefit obligation are the same as those used to compute actuarially determined contribution requirements.

1. Investment Return: 8.25 percent per annum, compounded annually.

2. Mortality: a. Non-disabled - 1971 Group Annuity Mortality Table.

b. Disabled - 1960 City of Cincinnati Experience Table.

3. Salary Scale: 5.5 percent per annum plus provision for an additional

9 percent increase in final average salary due to final

lump sum salary payment.

4. Rate of Termination: 1979 City of Cincinnati Experience Table.

5. Rate of Disability: 1979 City of Cincinnati Experience Table.

6. Asset Valuation: Book Value.

7. Assumed Retirement

Age: 62.

8. Medical Benefits: Current premium costs with projected increases of 7

percent per annum.

The "entry age normal with frozen initial liability" is the funding method used by the actuary in computing the employer contribution rate and established actuarial liability

NOTES TO FINANCIAL STATEMENTS

for the years ended December 31, 1992 and 1991

of the system. The unfunded actuarial liability at December 31, 1992, was \$96,865,000. The period of financing this unfunded liability is six years.

Trend information gives an indication of the progress made in accumulating sufficient assets to pay benefits when due. Ten-year trend information is available and the Analysis of Funding Progress is available for years 1987 through 1992 only.

Other Postemployment Benefit Information. The City System provides hospital and Surgical Insurance to retired members who have earned fifteen years credited service at the time of termination or terminate after age sixty with five years credited service and those who are receiving survivor benefits of eligible members are entitled to have their Hospital and Surgical Insurance premiums paid by the System. When benefits under the coverage would be reduced by reason of the retired member's eligibility for hospital and medical benefits under federal social security laws, the System will pay whatever additional fees are required for the federal medical coverage.

The health care coverage provided by the City System is considered an Other Postemployment Benefit (OPEB). It is advanced funded on an actuarially determined basis as a portion of the employer contribution requirement to the System. The Cincinnati Municipal Code provides authority for employer contributions. Health care coverage has been included in the calculation of the pension benefit obligation. Assets and liabilities are not separately determined.

Public Employees' Retirement System. MSD has 24 employees, as of December 31, 1992, who are participants of the Public Employees' Retirement System administered by the State of Ohio. This plan is not a significant portion of the overall operations of MSD. Additional disclosures concerning this plan, including other postemployment benefit information, can be found in the plan's annual financial statements.

9. Related Party Transactions

Cincinnati Water Works provides billing and collection services on customers' accounts for MSD. Fees for these services for 1992 and 1991 were \$3,157,000 and \$2,969,000, respectively. Fees are also paid to other municipalities and villages within Hamilton County for collection of sewerage bills.

NOTES TO FINANCIAL STATEMENTS

for the years ended December 31, 1992 and 1991

The City of Cincinnati provides "overhead" services to MSD, such as check disbursement, investment and legal services, etc. The fees for these services for 1992 and 1991 were \$1,837,000 and \$1,632,000, respectively. In addition, the City's Municipal Garage provides gasoline and repairs vehicles for MSD. Fees for these services were \$803,000 and \$852,000 for 1992 and 1991, respectively.

10. Commitments and Contingencies

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The City of Cincinnati and the Board of County Commissioners of Hamilton County, Ohio, are parties to a Federal Consent Order which was entered in settlement of United States of America vs. The Board of County Commissioners of Hamilton, County, Ohio, et al., Case No. C-1-85-0693. The City and County have continued in their efforts to negotiate an amendment to change certain construction schedules appearing in exhibits to that order. The City and County believe these changes are due to circumstances beyond the control of either, and are seeking approval of those schedule modifications from the United States Environmental Protection Agency. The consent order provides for stipulated penalties for failure to meet certain construction schedule deadlines but specifically contemplates that no such penalties will be collected from either defendant where the non-compliance was beyond the reasonable control of the defendants. In addition, according to MSD's Chief Legal Counsel, EPA has requested the payment of \$290,000 in stipulated penalties under the Consent Order for certain effluent limit excursions. The Consent order provides for stipulated penalties under certain conditions, and although the City and County have argued that no substantial penalties are appropriate, it appears that EPA does intend to extract some monetary payment for the excursions. Currently, the City is awaiting EPA's response to certain defenses presented during 1992.

The City of Cincinnati and the Board of County Commissioners executed a Consent Decree with the State of Ohio on March 16, 1992, in the context of Hamilton County Common Pleas, Case No. A-9202450. This case alleged that the City and Board failed to demonstrate adequate implementation of the approved pretreatment program. The Consent Decree required the City and Board to (A) immediately implement its enforcement response plan for all instances of industrial user non-compliance; (B) to issue effective and enforceable compliance orders and schedules for all industrial users in significant non-compliance during 1991; and (C) pay \$170,000 in satisfaction of all claims for civil penalties. The \$170,000 payment has

NOTES TO FINANCIAL STATEMENTS

for the years ended December 31, 1992 and 1991

been made. The City Manager appointed a pre-treatment enforcement team consisting of pretreatment specialists and attorneys with the express goal of improving the pretreatment enforcement program and satisfying all concerns of Ohio EPA. Management believes that MSD's Pretreatment Program is now operating in full conformity with state and federal law and no further enforcement action by the State against the City or Board is anticipated.

11. Subsequent Events

Bond Issue. On April 21, 1993, the District issued \$171,790,000, 1993 Series A Sewer System Improvement and Refunding Revenue Bonds dated April 15, 1993. The proceeds from the sale of such bonds, together with certain other available funds of the District are to be used to 1) reimburse the District for the cost of purchasing certain equipment, constructing certain improvements and making certain other capital expenditures for which the District has already expended the funds, 2) provide funds for new capital improvement projects, 3) advance refund the 1986 Bonds maturing December 1, 2006, 2010, and 2011 in the principal amount of \$71,960,000, and the 1991 Bonds maturing December 1, 2013 in the principal amount of \$31,915,000, 4) fund a portion of the Bond Reserve Requirement and 5) pay a portion of the costs of issuance of the 1993 bonds.

The 1993 bonds are special obligations of the District, payable solely from the net revenues of the District and are issued as parity with the 1985 bonds, the 1986 bonds, and the 1991 bonds, secured equally and ratably under the trust agreement. The 1993 bonds are dated April 15, 1993 and bear interest ranging from 2.45 percent to 5.60 percent and mature at varying amounts through the year 2016.

Rate Increase. The Hamilton County Board of Commissioners approved a sewer service charge rate increase effective April 14, 1993 of 20 percent.

TABLE 1

METROPOLITAN SEWER DISTRICT
ESTIMATED NUMBER OF ACCOUNTS AND WASTEWATER VOLUME

	No	umber of Accounts	:		Billable Wastewater	Average Usage Per
Year	Residential	Commercial	Industrial	Total	Volume Ccf	Account Ccf/Acct.
			<u>Historical</u>			
1988	192,267	20,222	939	213,428	49,397,500	231.4
1989	193,252	20,503	996	214,751	47,794,000	222.6
1990	194,778	20,638	987	216,403	48,179,200	222.6
1991	195,814	20,787	995	217,596	48,365,700	222.3
1992	197,659	20,690	993	219,342	46,596,900	212.4
			Projected			
1993	198,157	20,959	995	220,111	48,198,400	219.0
1994	199,406	21,051	995	221,452	48,380,400	218.5
1995	200,662	21,145	995	222,802	48,568,800	218.0
1996	201,925	21,237	995	224,157	48,752,000	217.5
1997	203,198	21,330	995	225,523	48,936,700	217.0

Ccf - Hundred cubic feet or 748 gallons

The Board of County Commissioners of Hamilton County, Ohio met at a regular session on the 24th day of February, 1993, with the following members present:

RESOLUTION

ADOPTING AN OPERATING BUDGET FOR 1993 FOR THE METROPOLITAN SEWER DISTRICT OF GREATER CINCINNATI

WHEREAS, the Director of the Metropolitan Sewer District of Greater Cincinnati and the Department of Sewers has submitted an operating budget for 1993, for the Metropolitan Sewer District of Greater Cincinnati, and

WHEREAS, this Board of County Commissioners of Hamilton County, Ohio, has reviewed said operating budget;

WHEREAS, estimated operating revenues for the fiscal year beginning January 1, 1993 and unappropriated surplus funds available for use by the Metropolitan Sewer District are sufficient to meet the requirements of the aforesaid operating budget.

NOW, THEREFORE, BE IT RESOLVED by the Board of Hamilton County Commissioners of Hamilton County, Ohio, that the aforesaid operating budget for fiscal year beginning January 1, 1993, be and hereby is adopted and appropriated as follows:

DIVISION	CODE	PERSONNEL SERVICES 7100	OIHER EXPENSES 72/7400	1993 BUDGET
Office of Director Wastewater Engineering Wastewater Administration Wastewater Treatment Wastewater Collection Industrial Waste	701x410 701X420 701X430 701X440 701X450 701X460	\$ 254,445 4,411,711 1,033,582 13,740,472 4,865,081 1,808,850	\$ 303,125 2,693,593 5,474,634 20,412,188 7,721,322 1,564,840	\$ 557,570 7,105,304 6,508,216 34,152,660 12,586,403 3,373,690 64,243,843
Motorized Equipment Office, Technical & Operating Equipment	701X981 701X982		·	1,069,262 840,792
Debt Service	701X490	-		22,578,334
TOTAL OPERATING BUDGET		``		\$88,772,231

DEBT SERVICE REQUIREMENTS ON THE 1993 RONDS AND CURRENT OUTSTANDING OBLIGATIONS

The following table sets forth, for each year the 1993 Bonds are outstanding, the amounts required in such year to be made available for the captioned purpose, and also the principal and interest on the current outstanding Obligations which will continue to be outstanding after the issuance of the 1993 Bonds.

	•	1993	Bonds	•			
<u>Year</u>	Principal and Interest Requirements on the Prior Bonds (1)	Principal Maturities or Mandatory Redemption	Interest (2)	<u>Subtotal</u>	Total Revenue Bond Principal and Interest Requirements	Total Principal and Interest on Other Outstanding Obligations(3)	Total Principal and Interest Requirements
1993 1994 1995 1995 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016	8,911,895.00 8,908,690.00 8,909,772.50 8,912,162.50 8,908,922.50 8,912,217.50 8,909,057.50 8,909,057.50 8,909,057.00 7,490,760.00 7,486,680.00 7,486,680.00 7,490,560.00	3,275,000.00 740,000.00 760,000.00 785,000.00 815,000.00 845,000.00 930,000.00 975,000.00 2,460,000.00 2,695,000.00 11,615,000.00 12,905,000.00 12,905,000.00 14,330,000.00 15,045,000.00 15,045,000.00 16,650,000.00	5,567,348.35 8,788,105.00 8,767,755.00 8,741,155.00 8,710,540.00 8,676,310.00 8,639,130.00 8,598,420.00 8,598,420.00 8,506,470.00 8,253,655.00 8,114,862.50 7,967,702.50 7,413,057.50 6,823,220.00 6,196,250.00 4,107,250.00 3,390,750.00 2,612,500.00 1,793,662.50 919,537.50	8,842,348,35 9,528,105,00 9,527,755,00 9,526,155,00 9,525,540,00 9,521,310,00 9,524,130,00 9,528,420,00 9,528,420,00 10,946,470,00 10,946,470,00 10,948,655,00 10,944,862,50 18,432,702,50 18,438,057,50 18,438,200,00 18,436,010,00 18,436,010,00 18,436,010,00 18,436,010,00 18,437,250,00 18,437,250,00 18,437,250,00 18,437,500,00 18,437,500,00 18,437,500,00 18,434,662,50	17,754,243.35 18,436,795.00 18,437,527.50 18,438,317.50 18,438,317.50 18,433,527.50 18,437,477.50 18,437,915.00 18,437,230.00 18,437,575.00 18,437,575.00 18,438,057.50 18,438,057.50 18,438,220.00 18,438,250.00 18,438,250.00 18,438,250.00 18,436,250.00 18,437,550.00 18,437,550.00 18,436,250.00 18,437,550.00 18,436,250.00 18,437,550.00 18,437,550.00 18,434,537,50	2,109,731.51 1,896,676.58 1,800,991.68 1,696,987.18 1,493,871.88 1,440,614.71 1,387,357.57 1,334,100.45 955,269.35 386,091.87 221,070.62 141,156.89 141,156.89 141,156.89 141,156.89 141,156.89 141,156.89 141,156.90 141,156.90 141,156.90 141,156.90 141,156.90 141,156.90 141,156.90 141,156.90 141,156.90	19, 863, 974, 86 20, 333, 471, 58 20, 238, 519, 18 20, 135, 304, 68 19, 928, 334, 38 19, 874, 142, 21 19, 821, 080, 07 19, 771, 577, 95 19, 393, 184, 35 18, 823, 321, 87 18, 657, 20, 62 18, 578, 731, 89 18, 576, 579, 40 18, 578, 731, 89 18, 577, 166, 89 18, 577, 166, 89 18, 577, 166, 89 18, 577, 406, 90 18, 578, 406, 90 18, 576, 930, 90 18, 576, 930, 90 18, 576, 930, 90 18, 576, 930, 90 18, 468, 297, 39 18, 443, 562, 50 18, 434, 537, 50
Total	110,147,900.00	171,790,000.00	159,861,335,85	331,651,335.85	441,799,235.85	16,160,153.75	457,959,389.60

Excluding the Refunded Bonds.

⁽¹⁾ (2) Interest shown includes all interest from April 15, 1993, part of which will be paid as accrued interest by the purchasers of the 1993 Bonds.

Includes all County obligations for General Obligation Bonds, General Obligation Notes and other Obligations for borrowed money with respect to the Sewer System having a maturity of more than 365 days from incurrence, excluding the Bonds. The County had no General Obligation Bonds or Notes outstanding with regard to MSD. (3)

1994 BUDGET

12/31/93

!		1993 BUDGET			1994 BUDGET		INTEREST	PRINCIPAL	: :
DESCRIPTION	PRINCIPAL II	INTEREST	TOTAL	PRINCIPAL	INTEREST	TOTAL	RATE PERCENT	BALANCE OUTSTANDING	DATE
REVENUE/GENERAL OBLIGATION BONDS	ON BONDS								
APRIL 1, 1974 SERIES, CITY OF OCTOBER 1, 1985 SERIES A APRIL 1, 1986 SERIES A JANUARY 15, 1991 SERIES A	\$10,000 \$2,330,000 \$775,000 \$985,000	\$4,025 \$625,520 \$5,957,470 \$5,689,950	\$14,025 \$2,955,520 \$6,732,470 \$6,674,950	\$5,000 \$2,515,000 \$830,000 \$1,030,000	\$8,840,000 \$440,000 \$596,000 \$3,500,000	\$13,840 \$2,955,000 \$1,426,000 \$4,530,000	5.75% 8.18% 7.11% 6.26% 5.65%	\$5,000 \$5,240,000 \$6,445,000 \$56,440,000 \$168,515,000	2000 2005 2001 2005 2016
JANUARY 1 TOTAL REVENUE/GENERAL OB	\$4,100,000	\$4,104,000 \$16,380,965	\$4,104,000 \$20,480,965	\$5,120,000	\$5,664,000 \$18,997,840	\$5,684,000 \$24,117,840		\$238,705,000	
TITLE II LOAN		\$ 0	\$ 0	\$5,150		\$5,150	0.00%	\$95,250	2012
WPCLF- L.M.					\$80,000	\$80,000	4.80%	T.B.D.	2014
O.W.D.A. NOTES) Ze		
	\$55,906	\$50,318	\$106,224 \$20,463	\$59,819 \$13,879	\$46,405 \$5,786	\$106,224 \$19,665	7.00% 5.75%	\$662,936 \$104,089	2002 2001
1695 PLEASANT RUN A AND B	\$38,265	\$1,578	\$39,843				}		2002
1775 MUDDY CREEK TREATM	\$154,984	\$99,287 \$1,662	\$254,271 \$64.967	\$154,984	\$69,600	0 \$ 0\$	0.23	. 41,412,500	7000
1785 12A SKIMMING MODIFIC	\$47,846	\$29,874	\$77,720	\$47,846	\$26,644	\$74,490	6.75%	\$406,691	2002
1785 13 DRAINS & REGULATO	\$1,311 \$69,813	\$36 \$4.800	\$1,347 \$74,613	\$34 ,907	\$960	\$35,867	•		1994
	\$142,637	\$36,105	\$178,742	\$142,637	\$26,477	45	6.75%	\$427,911	1996
1785 18 ELECTRIC SUBSTAIL	. 5113 586 295,865	\$5,712 \$57,148	\$45,274 \$170,734	\$113.586	\$50,617			44	2001
1785 21 SECONDARY TREATM		\$267 604	\$885,449	\$617,844	\$235,167	\$853,011		÷	2001
		\$17,138	\$35,855	\$20,119	\$15,736	ę,		\$ 2	2002
		\$323	\$718	\$422	\$296		_		2002
	52 52	\$30,472 \$39,801	\$89,563 \$51,591	\$60,272 \$13,008	\$29,290 \$38,532	\$89,562 \$51,540	7.11%	\$1,464,485 \$541,937	2013
TOTAL O.W.D.A. NOTES:	\$1,448,927	\$648,442	\$2,097,369	\$1,318,885	\$569,145	\$1,888,030	J	\$10,951,338	
TOTAL	\$5,548,927	\$17,029,407	\$22,578,334	\$6,444,035	\$19,646,985	\$26,091,020	J	\$249,751,588	-

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NOTES:
1. Assumes issuance of \$60,000,000 of revenue bonds at 7.00% over 20 years.
2. Title II loan is an assessment project.

ADDITIONAL SUPPORT INFORMATION

For Program Year 1994 (July 1, 1994 through June 30, 1995), jurisdictions shall provide the following support information to help determine which projects will be funded. Information on this form must be accurate, and where called for, based on sound engineering principles. Documentation to substantiate the individual items may be required by the Support Staff if information does not appear to be accurate.

1)	What is the condition of the be replaced, repaired, or exactors a copy of the current State	panded? For bridges, submit
	Closed	Poor X
	Fair	Good
sursubsigions signification in the second se	sent facility such as: inad face type and width; number standard design elements such ht distances, drainage stru acity. If known, give the appr be replaced, repaired, or expa	
	ediate danger of collapsing.	are deteriorated, loosing shape and in
	caract danger of corrapting.	
2)	soon (in weeks or months) Agreement from OPWC (tentation the project be under contractions of the project of th	t Program funds are awarded, how after receiving the Project vely set for July 1, 1994) would act? The Support Staff will be previous projects to help judge alar jurisdiction's anticipated
	6weeks/months (Ci	rcle one)
	Are preliminary plans or engi	neering completed? Yes No
	Are detailed construction pla	ns completed? Yes No
	Are all right-of-way and easen	nents acquired? Yes No N/A.
	Are all utility coordinations	completed? Yes No N/A
	Give an estimate of time, in item above not yet completed.	weeks or months, to complete any weeks/months

district.

	and welfare of the service area? (Typical examples may include the effects of the completed project on accident rates, emergency response time, fire protection, health hazards, user benefits, and commerce.) Please be specific and provide documentation if necessary to substantiate the data.
	Rehabilitation of the sewers will prevent: sewage from backing up into
	basements; the waters of the state being polluted from sewers overflowing;
	building bans being imposed by O.E.P.A. because of inadequate sewer
	capacity.
4)	What type of funds are to be utilized for the local share for this project?
	Federal ODOT Local _X
	MRF CD
	Other
	Note: If MRF funds are being used for the local share, the MRF application must have been filed by August 1, 1993 for this project with the Hamilton County Engineer's Office. The minimum amount of matching funds for grant projects (local share) must be at least 10% of the TOTAL CONSTRUCTION COST. What percentage of matching funds are being committed to this project?
	15 %
5)	Has any formal action by a federal, state, or local government agency resulted in a complete or partial ban of the use or expansion of use for the involved infrastructure? (Typical examples include weight limits, truck restrictions, and moratoriums or limitations on issuance of building permits.) A copy of the legislation must be submitted with the application. THE BAN MUST HAVE AN ENGINEERING JUSTIFICATION TO BE VALID.
	Complete Ban Partial Ban No Ban X
	Will the ban be removed after the project is completed?
	Yes No

4.35.

6)	What is the total number of existing users that will benefit as a result of the proposed project?
	100,000
	For roads and bridges, multiply current <u>documented</u> Average Daily Traffic by 1.20. For public transit, submit documentation substantiating the count. Where the facility currently has any restrictions or is partially closed, use documented traffic counts prior to the restriction. For storm sewers, sanitary sewers, water lines, and other related facilities, multiply the number of households in the service area by 4.
7)	Has the jurisdiction developed a Five Year Capital Improvement Plan as required in O.R.C., chapter 164? (This must be included with the application to be considered for funding.)
	Yes X No (Filed with prior application in June, 1993)
8)	Give a brief statement concerning the regional significance of the infrastructure to be replaced, repaired, or expanded.
	The existing sewers are deteriorated to the point of imminent collapse
	causing backup of sewage into basements, collapse of roadways and
	buildings, discharge of raw sewage to waters of the state, decrease in
	carrying capacity of the system, and violation of state and federal
	consent orders and N.P.D.E.S. permits.

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PAYMENT VOUCHERS

FOR TV INSPECTION

CLEANING AND
INVESTIGATION OF SEWERS

TO IDENTIFY SEWERS

TO BE REHABILITATED

USING

TRENCHLESS TECHNOLOGY

FORM NO. 37-STOP 06/08/93	CITY OF CINC	CINNATI	DOCIE	QV400 3083
	CLAIM VOUCHER	- INVOICE		CD Agy Voucher No.
Vendor Invoice No. 326			Vendo	or Code 011166500
City Order, Contract Agreement No. 35X7181	Metropolitan Sev	er Dist Stev	Checke Minges	Category For City Use Only
	Name of Department, Office or Inc			rei chy ose only
Reference No. 93025	1600 Gest Street	Cincinnati, O	H 45204	
	Send Check To SWS Envi	Address ronmental Servi	ce	-
Terms	•	Claimant (Vendor's or Contractor		
Partial	Tooso Indeco Br.	Claimant's Address	H 45241	
For City Use Only NOTICE: All invoices against the	City for purchases made or for serv		sented upon th	nis form. Send this Claim
	ess listed in the City's contract, pure			
For services	rendered from April	26, 1993 to M	iay 25,	1993 in
conjunction wi	th the flush clean	ing and various	other :	services
related to the	overall evaluation. The tasks accompli	and maintenance Ished are in acc	ordance	with the
attached daily	work sheets.			
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	CLAIMANT MUST NOT WRITE BE			
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s to Services or Quantities	Departmeny Division Head		City Manager or Pre	esident of Board
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Order, Contract	Votropolitan	Sewer Dist	Steve Minges	For City Use Only
greement No. 35X7181	Metroporrean	se or institution Receiving Good	is or Services	
	l .			
Reference No. 93025	1600 Gest St	reet, Cincinnat		
	Send Check SWS	Environmental :	ss Service	
Terms				
	10880 Indeco	Dr., Claimant (Vendor's or (ET", OH 45241	
Partial Final		Claimant's	Address	
For City Use Only NOTICE: All invoices against the	ac City for purchases made or	for services performed, mu	ist be presented upon t	his form. Send this Claim
NOTICE: All invoices against the Voucher/Invoice form to the add	iress listed in the City's contra	ct, purchase order or other	authorizing document	under "send invoices to".
VOUCHEI/IIIVOICO ICIII				
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Page 16				
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то	BE RETURNED TO DEPART	MENT AFTER PATMENT	BI TIMANOL	
I hereby certify that the items specified and	CLAIMANT MUST NOT W	or performed, and that the charg	es shown are correct and con	stitute legitimate
I hereby certify that the items specified and charges against the appropriation of fund	accounts shown below.	, ,		
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/ Order, Contra		Metropolii	tan Sewer Dist Ste	ve Min	Check Category
or Agreement No.	3311, 131		it, Office or Institution Receiving Goods or Se		For City Use Only
Reference No.	93025	•	Street, Cincinnati,		204
Terms		Send Check	VS Environmental Serv	ice	
/			CO Dr. Claimant (Vendor's of Contract	gif Nage)	41
Partial Final For City Use Only			Claimant's Address	;	
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FORM NO. 37-STORE	IS REV. 6/91			.7
Invoice Date	04/05/93	CITY OF CINC	CINNATI	DOCID (4/1/00 1752
Vendor Invoice No	o. 30231	CLAIM VOUCHER	- INVOICE	CD Agy Voucher No.
y Order, Contra	act	The Markon I draw C	Consider That about these	
Agreement No.		The Metropolitan S of Greater Cincinn		Check Category For City Use Only
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Reference No.		looo Gest Street,	Cincinnaci, Ohio 45204	
		Send Check	Address	
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For City Use Only		Transfer of the second	Claimant's Address	· 计正正元 计 · · · · · · · · · · · · · · · · · ·
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Invoice Date 06/03/93	CITY OF	CINCINNATI	Ŧ į	DOCID (2 V401) 2755
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Vendor Invoice No. 30359		January 1144010L		Vendor Code 5000
/ Order, Contract or Agreement No. 25X7092		olican Sewer Distr Cincionaci	ict	Check Category
	Name of Department	, Office or Institution Receiving	Goods or Services	For City Use Only
Reference No.		•		•
rieletetice No.	Send Check	Street, Cincinnati	., Ohio 45204	The second secon
Terms NET	To 335 C	orporation		
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For City Use Only			nt's Address	
NOTICE: All invoices against the C	City for purchases made	or for services performed,	must be presented	upon this form. Send this Claim
Voucher/Invoice form to the addres	ss listed in the City's co	ntract, purchase order or of	ther authorizing doc	ument under "send invoices to".
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	ervices for Rai			
	Inflow Investig	acions for s in Hamilton Coun	n tr ve	
MSD CIP No. 9		o in naminicum volti	·- /	
Engineering A	greement No. 25	X7092 dated July 1	5, 1992	
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Vendor Invoice N	0.30103	CLAIM V	OUCHER - INVOICE		CD Vendor Code	Agy Voucher No.
/ Order, Contr	act	The Metro	politan Sewer D	Mistrict		
u Agreement No	2537092	of Greats	r Cincinnati		Check Catego	Far City Use Only
		Name of Departmen	it, Office or Institution Receiving	Goods or Services		
Reference No.			Street, Cincin		45204	
Terms	uer	Send Check To BBS	/ Corporation	Address		
remaining the second				s or Contractor's Name)		
Partial √ Final For City Use Only		11238 Cor	nell Park Drive	e, Cincinnat: ant's Address	i, Ohio	45242
		for purchases mad	e or for services performed		upon this form	Sand this Claim
Voucher/Invoi	ice form to the address if	sted in the City's co	ontract, purchase order or o	ther authorizing docu	iment under "se	end involces to".
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TRENCHLESS TECHNOLOGY LITERATURE

Introduction

The NuPipe process creates a tight-fitting PVC pipe (NuPipe) within an old deteriorated pipeline by inserting a heated, folded PVC pipe which is then sequentially unfolded and expanded against the interior surface of the existing pipe. This new PVC pipe is a smooth, jointless, structural conduit that meets the performance requirements of ASTM D 3034. NuPipe installation is accomplished through existing manholes requiring no excavation.

The PVC pipe is manufactured in the folded shape and spooled in a continuous length for storage and shipping.

Figure 1

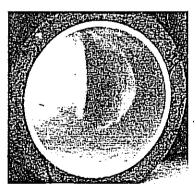
After the existing pipeline has been inspected with a video camera and cleaned, a heat-containment tube is pulled through the line and inflated. The folded PVC pipe is heated until it becomes flexible and is then pulled through the heat-containment tube and the host pipe.

Figure 2

A special rounding device is then inserted in the end of the folded PVC pipe and propelled by steam pressure to the termination point. As the rounding device progresses, it expands the PVC pipe tightly against the walls of the host pipe. Any liquids in the host pipe are pushed out ahead of the rounding device.

Figure 3

NuPipe molds to the shape of the host pipe and forms distinct dimples at service connections. Pressure is maintained in the rounded NuPipe until it cools to a rigid state. Because the NuPipe expands slightly into irregularities caused by breaks, joints, offsets, or missing sections in the host pipe, a mechanical lock is created between the NuPipe and the host pipe. To complete the installation, the ends of the NuPipe are cut off, and laterals are reopened by a remote controlled cutter from within the reconstructed pipeline.





Power Unit: Heat Chamber

RuPpe

Spool of fidded NuPipe Spulled: Tube

Damaged Pipeline

Folded NuPipe is heated until it is soft and flexible, then pulled through the damaged pipeline.

Wanhole

Figure 1

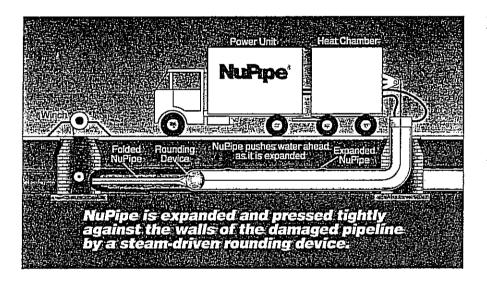


Figure 2

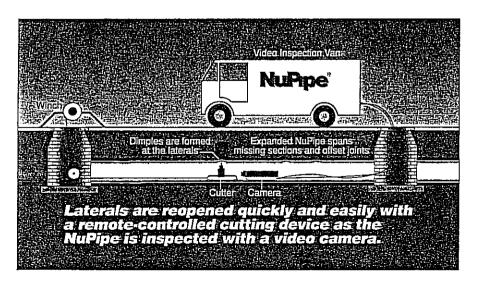


Figure 3

Introduction

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Insituform is a unique process for reconstructing damaged pipeline systems in municipal and industrial applications. A new Cured-in-Place Pipe (CIPP), or Insitupipe, is formed inside of the existing conduit by using fluid pressure, typically water, to install a flexible tube saturated with a liquid thermosetting resin; the water is then heated to harden the resin. This process results in a continuous, tight-fitting, pipe-withina-pipe. The Insituform process is cost-effective and fast and can be used in a variety of gravity and pressure applications such as sanitary sewers, storm sewers, process piping, drinking water systems, and ventilation systems.

The Insituform process was invented in England in 1971. The process was brought to the United States in 1977 and has been installed worldwide in over fifteen million feet of deteriorated pipeline with over eight million feet in the United States. Several installations have been inspected after many years of service and found to be in excellent condition. In 1991, samples were cut from the first Insituform installation in London, England. After 20 years of exposure to domestic and industrial sewage, the Insitupipe exceeded current industry standards for physical strength and exhibited no signs of deterioration.

Insituform has developed methods to reconstruct service laterals from both inside of the mainline sewer using robotic techniques and from above ground via cleanouts or small excavation pits. This technology enables Insituform to provide complete piping system rehabilitation techniques to best serve the needs of customers.

Insituform of North America, Inc., licensor of the Insituform process in the United States, operates through sub-licensees in all 50 states and the U.S. Virgin Islands. At corporate head-quarters in Memphis, Tennessee, a large staff of highly trained engineers and scientists provide nationwide engineering support and extensive research and development activities. Insituform of North America, Inc. is a publicly held company on the NASDAQ exchange.

Although the Insituform process may appear to be simple, it is a state-of-the-art technology involving sound engineering practices, exacting materials requirements and experienced field installation personnel in order to manufacture quality pipe in an underground environment. A flexible, resin absorbent, fabric Insitutube, coated on the outside with an elastomeric material, is manufactured to fit the cross-section, length and required design thickness for the damaged pipe. The Insitutube is vacuum impregnated (wet-out) with a liquid thermosetting resin. This work is normally done at the Insitutorm installer's wet-out facility. However, for large diameter Insitutubes which are impractical to transport, wet-out can be accomplished at the job site with specially designed portable equipment.

The impregnated Insitutube material is installed in the existing pipe through a manhole or other access point via a temporary inversion standpipe and inversion elbow (see Figure 1, Stage 1). A top inversion technique can also be used where the Insitutube itself forms the inversion standpipe. Water from nearby hydrants, or other convenient source, is used to fill the inversion standpipe. The force of the column of water pushes the wet-out Insitutube inside-out, termed inversion, and into the pipe being reconstructed (see Figure 1, Stage 2). As the Insitutube travels through the pipe, water is continually added to maintain a constant pressure. The inversion process results in the elastomeric coating of the Insitutube being the new interior surface of the pipe.

This inversion process results in no relative movement between the Insitutube and the deteriorated existing pipe wall minimizing trauma and potential damage to the flexible tube material. Another benefit of the inversion technique is that incoming and standing waters are forced ahead of the inverting Insitutube and out of the pipe reach; therefore, no water is trapped behind the Insitutube that could inhibit proper cure of the resin or alter the shape of the finished Insitupipe.

After the Insitutube reaches the termination point, the water is heated to cure the thermosetting resin (see Figure 1, Stage 3). Once the Insitutube has hardened and cooled down, the water pressure is released and the ends are trimmed. Service connections are reinstated internally with a remote control cutting device or by man-entry techniques (see Figure 1, Stage 4). The Insituform operation is then completed and the newly installed pipe is ready for immediate use.

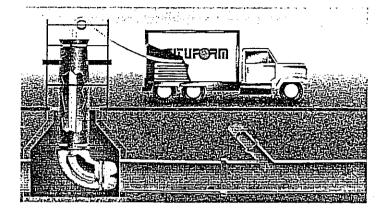
Installation

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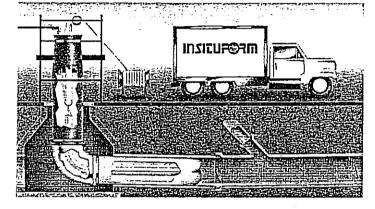
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Figure 1 INSITUFORM INSTALLATION

Stage 1

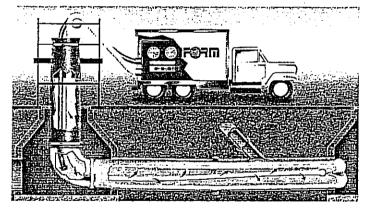


Stage 2

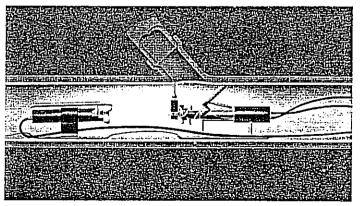


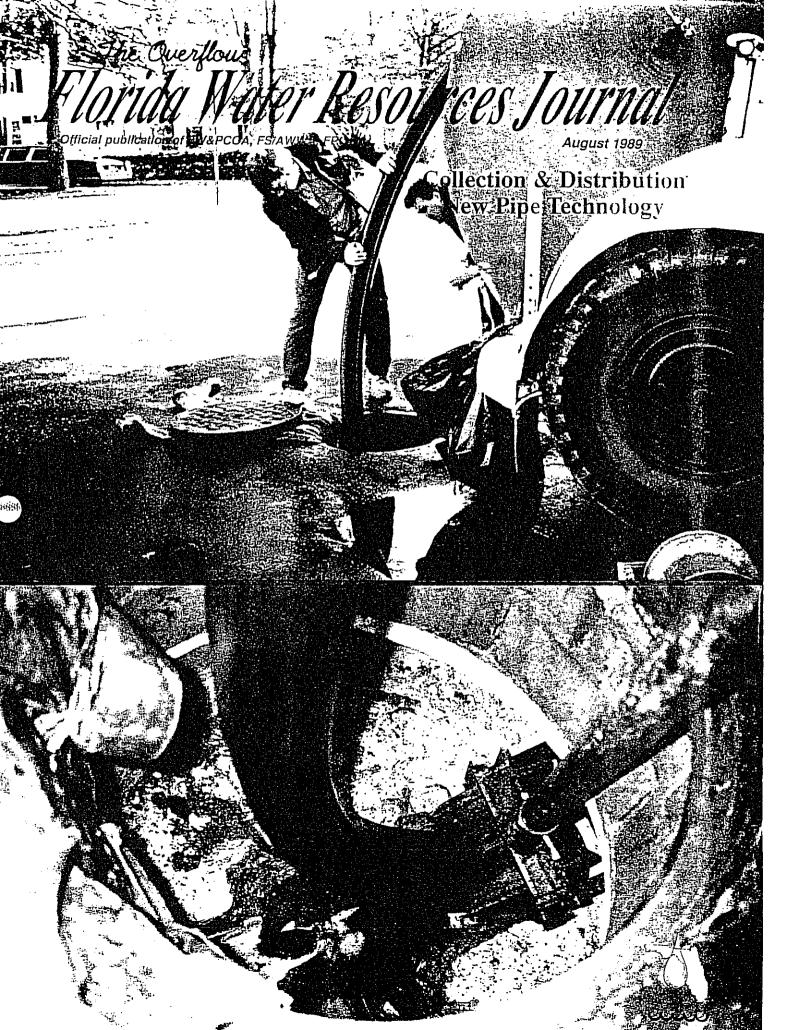
Stage 3

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Stage 4





No-Dig Pipe Restoration

U-Liner Applications



orrosion and deterioration of sewer lines is a common problem in many Florida towns and cities. Municipalities often choose conventional methods of rehabilitating damaged pipes, such as excavating and slip lining. However, in an age of emerging new technologies with specific advantages, a growing number of municipalities are choosing newer applications.

A primary advantage, of course, is that excavation is not necessary. That was an important consideration at Hastings when TV monitoring and smoke tests showed massive infiltration of storm water into the sanitary sewer. The town's wastewater treatment plant was already working at capacity, and the infiltration during rainfall events caused serious problems at the plant.

One example occurred in the contrasting municipalities of Hastings and Orlando. Hastings, located between Palatka and St. Augustine, has a population of less than one thousand. Orlando is rapidly approaching one million. Recently, both encountered sewer line problems and chose the U-Liner process as the solution.

The U-Liner process, developed by Pipe Liners, Inc. of Metairie, Louisiana, involves a thermoplastic, polyethylene pipe. It is extruded with a diameter slightly larger than the inside diameter of the pipe to be fitted. Using a proprietary thermochemical deforming process, the liner, which is

manufactured in various wall thicknesses, is compressed into a U-shape, thus reducing its outside diameter by 25 to 35 percent. This temporary diameter reduction allows the liner to be pulled through the sewer pipe with minimal friction.

Once the liner has been set in place, a patented heatpressure process restores the liner to its original round shape for a tight fit, leaving no annular space. Virtually all of the carrier pipe's original flow capacity is restored.

U-Liner can be installed in continuous lengths, and buttfusion isn't required. Lateral connections are cut from within using a video-monitored milling apparatus. U-Liner installation equipment records measurements at all connection points, and provides a video/data record of each job.



U Liner Installation

A portion of the sewer line was on the major highway through the town. Excavation would have meant traffic tie-ups and loss of commerce to the downtown area.

Use of the U-Liner process allowed the problem to be corrected within two days —during peak traffic times—with no excavation.

In a similar manner, a section of sewer line in Orlando was found to be cracked and had concrete deposits left over from earlier overhauling, Griner's A-One Pipeline Service was contracted to apply the U-Liner process.

The city's Construction Field Representative, Cecil Walker, was impressed at how fast the repairs could be accomplished, the ease at which the materials were handled, and, from an environmental viewpoint, the fact that no chemicals are used.

Appreciation for information in this article to: Griner's A-One Pipeline Service, Orlando; Wayne Sistrunk of the engineering firm of M.V. Protheroe, Gainesville; and Cevil Walker, City of Orlando.

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STATE CAPITAL IMPROVEMENT PROGRAM

LOCAL TRANSPORTATION IMPROVEMENT PROGRAM ROUND NO. 8

PROGAM YEAR 1994 PROJECT SELECTION CRITERIA - JULY 1, 1994 TO JUNE 30, 1995

ADOPTED BY THE DISTRICT 2 INTEGRATING COMMITTEE

JULY 16, 1993

JURISDICTION/AGENCY: HAMILTON	COUNTY - MSD	
NAME OF PROJECT: TRENCHCESS	TECHNOLOGY SEWER	LEHAB.

TOTAL POINTS FOR THIS PROJECT: 66

NO. POINTS

- 1) If SCIP/LTIP Funds are granted, when would the construction contract be awarded? (The Support Staff will assign points based on engineering experience.)
 - 10 Points Will be under contract by December 31, 1994
 - 5 Points Will be under contract by March 30, 1995
 - 0 Points Will not be under contract by March 30, 1995

20

- What is the condition of the infrastructure to be replaced or repaired? For bridges, base condition on latest general appraisal and condition rating.
 - 20 Points Poor Condition
 - 16 Points -
 - 12 Points Fair to Poor Condition
 - 8 Points -
 - 4 Points Fair Condition

NOTE: If the infrastructure is in "good" or better condition it will NOT be considered for SCIP/LTIP funding, unless it is a betterment project that will improve serviceability.

- 3) If the project is built, what will be its effect on the facility's serviceability?
 - 10 Points Significant effect (e.g., widen to and add lanes along entire project)
 - 8 Points Moderate to significant effect
 - 6 Points Moderate effect (e.g., widen exist. lanes)
 - 4 Points Moderate to little effect
- /O 4) How important is the project to HEALTH, SAFETY, AND WELFARE of the public and the citizens of the District and/or service area?
 - 10 Points Highly significant importance, with substantial impact on all 3 factors
 - 8 Points Considerably significant importance, with substantial impact on 2 factors OR noticeable impact on all 3 factors
 - 6 Points Moderate importance, with substantial impact on 1 factor or noticeable impact on 2 factors
 - 4 Points Minimal importance, with noticeable impact on 1 factor
 - 2 Points No measurable impact
- 6 5) What is the overall economic health of the jurisdiction?
 - 10 Points Poor
 - 8 Points -
 - 6 Points Fair
 - 4 Points -
 - 2 Points Excellent
- 6) What matching funds are being committed to the project, expressed as a percentage of the TOTAL CONSTRUCTION COST?

 Loan and Credit Enhancement projects automatically receive 5 points, and no match is required. All grant funded projects require a minimum of 10% matching funds.
 - 5 Points 50% or more
 - 4 Points 40% to 49.99%
 - 3 Points 30% to 39.99%
 - 2 Points 20% to 29.99%
 - 1 Point 10% to 19.99%

- 7) Has any formal action by a federal, state, or local government agency resulted in a partial or complete ban of the usage or expansion of the usage for the involved infrastructure? POINTS MAY ONLY BE AWARDED IF THE END RESULT OF THE PROJECT WILL CAUSE THE BAN TO BE LIFTED.
 - 5 Points Complete or significant ban
 - 3 Points Partial or moderate ban
 - O Points No ban of any kind
- 8) What is the total number of existing daily users that will benefit as a result of the proposed project? Appropriate criteria include current traffic counts, households served, when converted to a measurement of persons. Public transit users are permitted to be counted for roads and bridges, but only when certifiable ridership figures are provided.
 - 5 Points 10,000 or more
 - 4 Points 7,500 to 9,999
 - 3 Points 5,000 to 7,499
 - 2 Points 2,500 to 4,999
 - 1 Point 2,499 and under
- 9) Does the infrastructure have REGIONAL impact? Consider origins and destinations of traffic, functional classification, size of service area, number of jurisdictions served, etc.
 - 5 Points Major impact (e.g., major multi-jurisdictional route, primary feed route to an Interstate, Federal Aid Primary routes)
 - 4 Points -

 - 2 Points -
- 10) Has the jurisdiction enacted the optional \$5 license plate fee, an infrastructure levy, a user fee, or a dedicated tax for infrastructure?
 - 2 Points Two of the above
 - 1 Point One of the above
 - O Points None of the above

ADDENDUM TO THE RATING SYSTEM DEFINITIONS

CRITERION 2 - CONDITION

Poor - Condition is dangerous, unsafe or unusable

Fair to Poor - Condition is inadequate or substandard

Fair - Condition is average, not good or poor

CRITERION 5 - ECONOMIC HEALTH

The following factors are used to determine economic health:

- 1) Median per capita income
- Per capita assessed valuation of the total community real estate and personal property
- 3) Poverty indicators
- 4) Effective tax rates
- 5) Total corporate debt as a percentage of assessed valuation
- 6) Municipal revenues and expenditures per capita

CRITERION 9 - REGIONAL IMPACT

Major impact - Primary water or sewer main serving an entire system

Moderate impact - Waterline or storm sewer serving only part of a system

Minimal impact - Individual waterline or storm sewer not part of a system